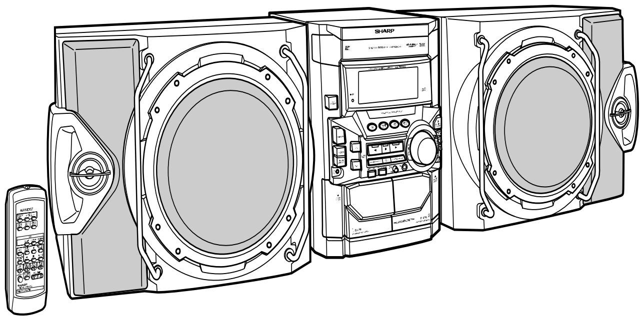
SHARP SERVICE MANUAL

No. S9156CDM4000W



MINI COMPONENT SYSTEM

MODEL CD-M4000W

SPEAKER SYSTEM

MODEL CP-M4000

COMPACT disc DIGITAL AUDIO   CD-R/RW Playable   3 DISC

• In the interests of user-safety the set should be restored to its original condition and only parts identical to those specified be used.

CONTENTS

SHARP CORPORATION

SAFETY PRECAUTION FOR SERVICE MANUAL

WARNINGS

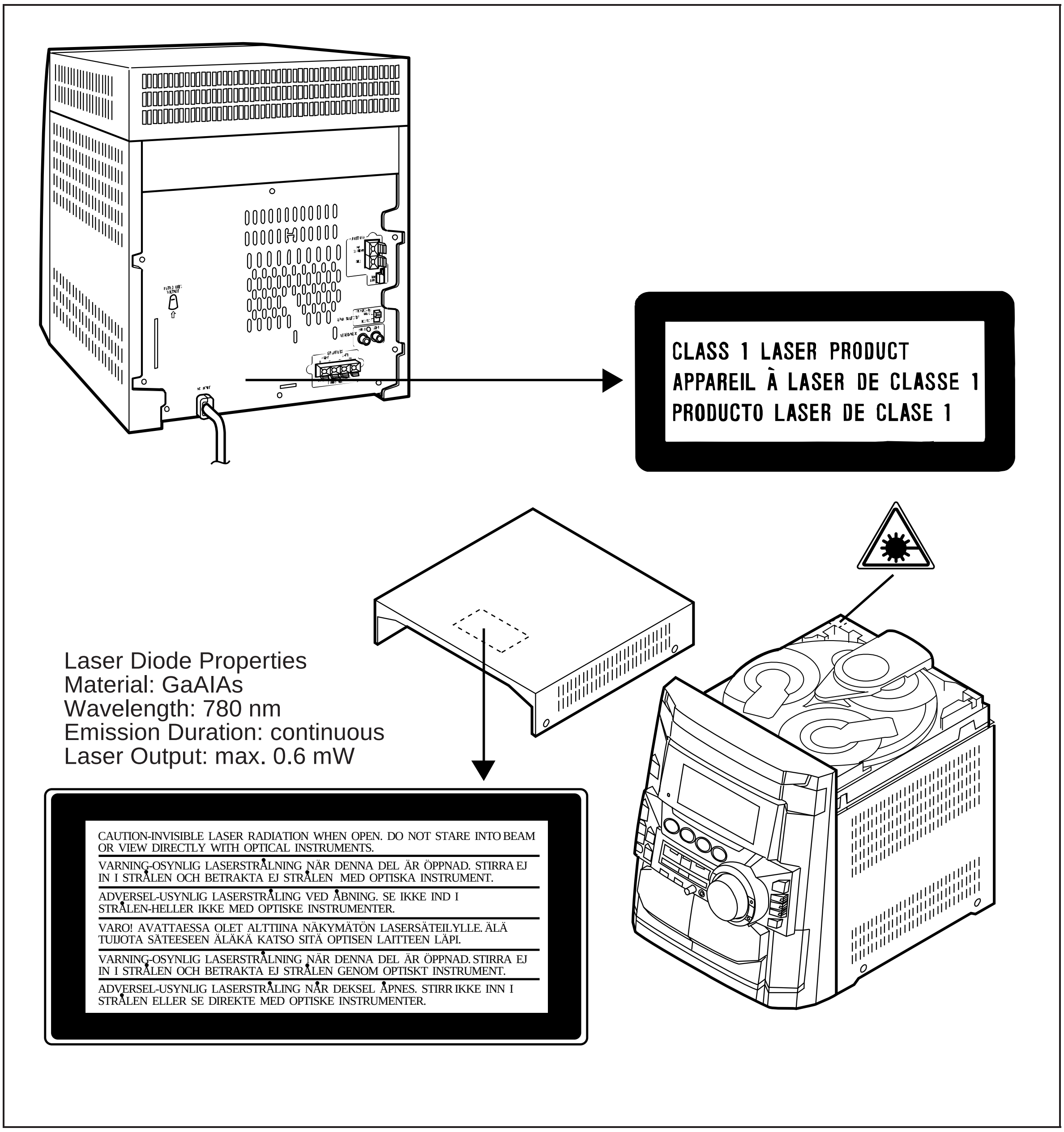
THE AEL (ACCESSIBLE EMISSION LEVEL) OF THE LASER POWER OUTPUT IS LESS THAN CLASS 1 BUT THE LASER COMPONENT IS CAPABLE OF EMITTING RADIATION EXCEEDING THE LIMIT FOR CLASS 1. THEREFORE IT IS IMPORTANT THAT THE FOLLOWING PRECAUTIONS ARE OBSERVED DURING SERVICING TO PROTECT YOUR EYES AGAINST EXPOSURE TO THE LASER BEAM.

1-WHEN THE CABINET IS REMOVED, THE POWER IS TURNED ON WITHOUT A COMPACT DISC IN POSITION AND THE PICKUP IS ON THE OUTER EDGE THE LASER WILL LIGHT FOR SEVERAL SECONDS TO DETECT A DISC. DO NOT LOOK INTO THE PICKUP LENS.

2-THE LASER POWER OUTPUT OF THE PICKUP UNIT AND REPLACEMENT SERVICE PARTS ARE ALL FACTORY PRESET BEFORE SHIPMENT.
DO NOT ATTEMPT TO READJUST THE LASER PICKUP UNIT DURING REPLACEMENT OR SERVICING.

3-UNDER NO CIRCUMSTANCES STARE INTO THE PICKUP LENS AT ANY TIME.

4-CAUTION-USE OF CONTROLS OR ADJUSTMENTS, OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

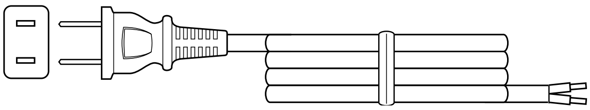


VOLTAGE SELECTION

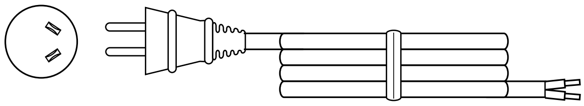
Before operating the unit on mains, check the preset voltage. If the voltage is different from your local voltage, adjust the voltage as follows.
Turn the selector with a screwdriver until the appropriate voltage number appears in the window (110 V, 127 V, 220 V or 230 V-240 V AC).

AC POWER SUPPLY CORD AND AC PLUG ADAPTOR

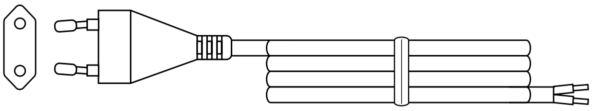
QACCA0003AW00



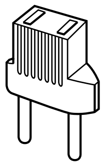
QACCL0005AW00



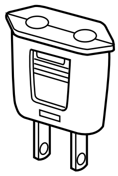
QACCE0008AW00



QPLGA0003AWZZ



QPLGA0004AWZZ



FOR A COMPLETE DESCRIPTION OF THE OPERATION OF THIS UNIT, PLEASE REFER TO THE OPERATION MANUAL.

SPECIFICATIONS

CD-M4000W

■ General

Power source	AC 110/127/220/230 - 240 V, 50/60 Hz
Power consumption	120 W
Dimensions	Width: 270 mm (10-5/8") Height: 330 mm (13") Depth: 372 mm (14-11/16")
Weight	9.4 kg (20.7 lbs.)

■ Amplifier

Output power	MPO: 520 W (260 W + 260 W) (10 % T.H.D.) RMS: 300 W (150 W + 150 W) (10 % T.H.D.) RMS: 244 W (122 W + 122 W) (0.9 % T.H.D.)
Output terminals	Speakers: 6 ohms Headphones: 16 - 50 ohms (recommended: 32 ohms)
Input terminals	Video/Auxiliary (audio signal): 500 mV/47 kohms Microphone: 1 mV/600 ohms

■ CD player

Type	3-disc multi-play compact disc player
Signal readout	Non-contact, 3-beam semiconductor laser pickup
D/A converter	1-bit D/A converter
Frequency response	20 - 20,000 Hz
Dynamic range	90 dB (1 kHz)

■ Tuner

Frequency range	FM: 88 - 108 MHz AM: 531 - 1,602 kHz

■ Cassette deck

Frequency response	50 - 14,000 Hz (Normal tape)
Signal/noise ratio	55 dB (TAPE 1, playback) 50 dB (TAPE 2, recording/playback)
Wow and flutter	0.3 % (WRMS)

CP-M4000

Type	4-way type speaker system Super Tweeter 8 cm (3-1/8") Tweeter 8 cm (3-1/8") Midrange 25 cm (10") Woofer
Maximum input power (Total)	300 W
Rated input power (Total)	150 W
Impedance	6 ohms
Dimensions	Width: 422 mm (16-5/8") Height: 330 mm (13") Depth: 306 mm (12-1/16")
Weight	8.5 kg (18.7 lbs.)/each

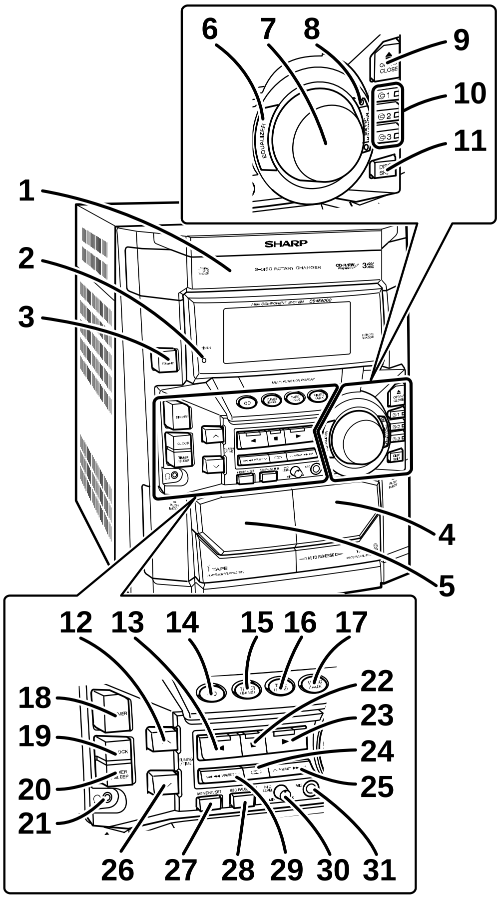
Specifications for this model are subject to change without prior notice.

NAMES OF PARTS

CD-M4000W

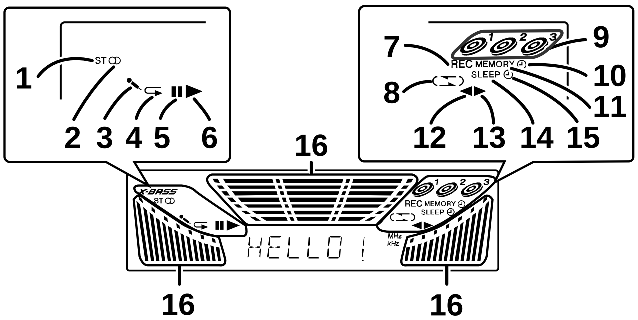
■ Front panel

1. Disc Tray
2. Timer Set Indicator
3. On/Stand-by Button
4. Tape 2 Cassette Compartment
5. Tape 1 Cassette Compartment
6. Equalizer Mode Select Button
7. Volume Control
8. Monster Bass/Demo Mode Button (with Indicator)
9. Disc Tray Open/Close Button
10. Disc Number Select Buttons (with Indicator)
11. Disc Skip Button
12. Tuning and Time Up Button
13. Tape 2 Reverse Play Button (with Indicator)
14. CD Button
15. Tuner (Band) Button
16. Tape (1 → 2) Button
17. Video/Auxiliary Button
18. Dimmer Button
19. Clock Button
20. Timer/Sleep Button
21. Headphone Socket
22. CD or Tape Stop Button (with Indicator)
23. CD Play or Repeat, Tape 1 Play, Tape 2 Forward Play Button (with Indicator)
24. Tape 2 Reverse Mode Select Button
25. CD Track Up or Fast Forward, Tape 2 Fast Wind, Tuner Preset Up Button
26. Tuning and Time Down Button
27. Memory/Set Button
28. Tape 2 Record Pause Button
29. CD Track Down or Fast Reverse, Tape 2 Fast Wind, Tuner Preset Down Button
30. Microphone Level Control
31. Microphone Socket



■ Display

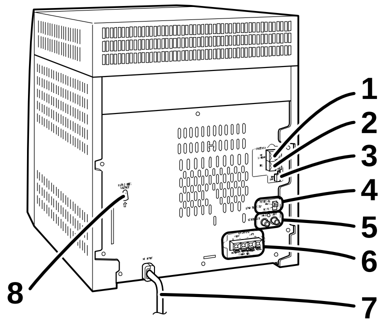
1. FM Stereo Mode Indicator
2. FM Stereo Receiving Indicator
3. Karaoke Mode Indicator
4. CD Repeat Play Indicator
5. CD Pause Indicator
6. CD Play Indicator
7. Tape 2 Record Indicator
8. Tape Reverse Mode Indicator
9. Disc Number Indicators
10. Timer Play Indicator
11. Memory Indicator
12. Tape 2 Reverse Play Indicator
13. Tape 1 Play or Tape 2 Forward Play Indicator
14. Sleep Indicator
15. Timer Recording Indicator
16. Spectrum Analyser/Volume Level Indicator



CD-M4000W

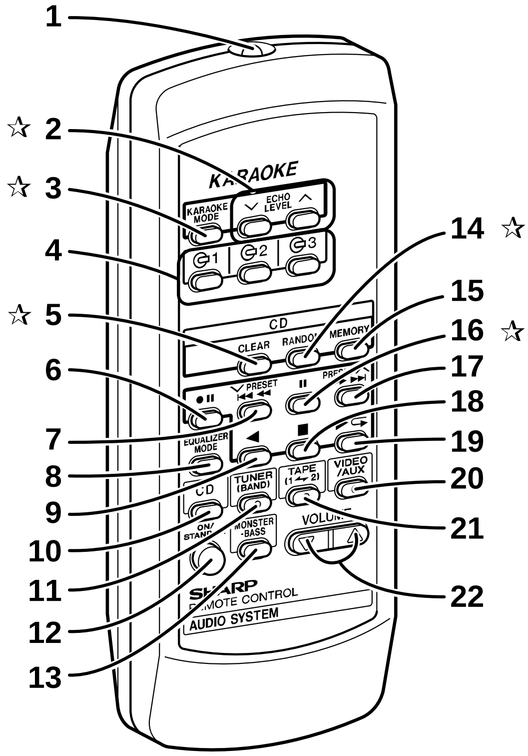
■ Rear panel

1. **FM 75 Ohms Aerial Terminal**
2. **FM Aerial Earth Terminal**
3. **AM Loop Aerial Socket**
4. **Span Selector Switch**
5. **Video/Auxiliary (Audio Signal) Input Sockets**
6. **Speaker Terminals**
7. **AC Power Lead**
8. **AC Voltage Selector**



■ Remote control

1. Remote Control Transmitter
2. **Echo Level Up and Down Buttons**
3. **Karaoke Mode Button**
4. Disc Number Select Buttons
5. **CD Clear Button**
6. Tape 2 Record Pause Button
7. CD Track Down or Fast Reverse, Tape 2 Fast Wind, Tuner Preset Down Button
8. Equalizer Mode Select Button
9. Tape 2 Reverse Play Button
10. CD Button
11. Tuner (Band) Button
12. On/Stand-by Button
13. Monster Bass Button
14. **CD Random Button**
15. CD Memory Button
16. **CD Pause Button**
17. CD Track Up or Fast Forward, Tape 2 Fast Wind, Tuner Preset Up Button
18. CD or Tape Stop Button
19. CD Play or Repeat, Tape 1 Play, Tape 2 Forward Play Button
20. Video/Auxiliary Button
21. Tape (1 ↔ 2) Button
22. Volume Up and Down Buttons

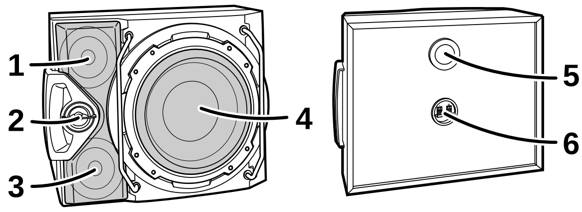


Buttons with "☆" mark in the illustration can be operated on the remote control only.
Other buttons can be operated both on the main unit and the remote control.

CP-M4000

■ Speaker system

1. Tweeter
2. Super Tweeter
3. Midrange
4. Woofer
5. Bass Reflex Duc
6. Speaker Terminals



OPERATION MANUAL

System Connections

■ Setting the AC voltage selector

Check the setting of the AC voltage selector located on the rear panel before plugging the unit into a wall socket. If necessary, adjust the selector to correspond to the AC power voltage used in your area.

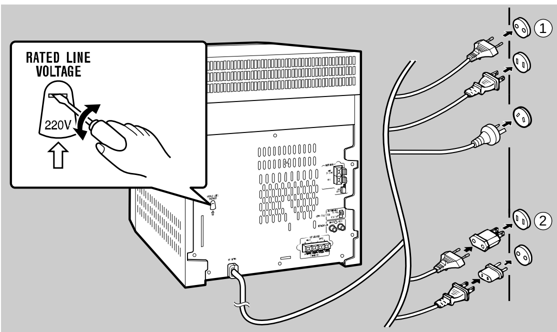
Turn the selector with a screwdriver until the appropriate voltage number appears in the window (110 V, 127 V, 220 V or 230 V - 240 V AC).

■ Connecting the AC power lead

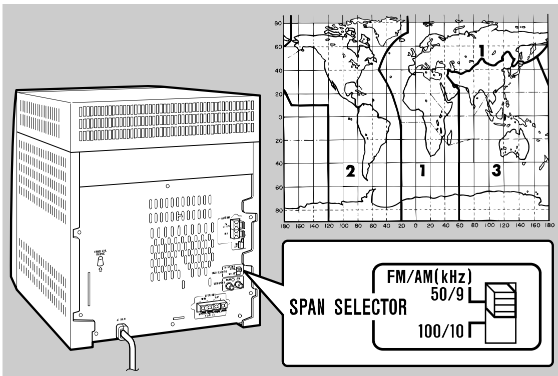
After making all connections, plug the unit. If you plug the unit first, the unit will enter the demonstration mode.

Note:
Unplug the AC power lead from the wall socket if the unit will not be in use for a prolonged period of time.

AC Plug Adaptor
In areas (or countries) where a wall socket as shown in illustration ② is used, connect the unit using the AC plug adaptor supplied with the unit, as illustrated. The AC plug adaptor is not included in areas where the wall socket and AC power plug can be directly connected (see illustration ①).



■ Setting the FM/AM span selector



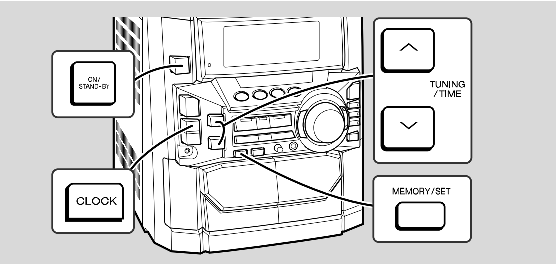
The International Telecommunication Union (ITU) has established that member countries should maintain either a 100 kHz or a 50 kHz interval between broadcasting frequencies of FM stations and 10 kHz or 9 kHz for AM station. The illustration shows the 50/9 kHz zones (regions 1 and 3), and the 100/10 kHz zone (region 2).
Before using the unit, set the SPAN SELECTOR switch (on the rear panel) to the interval (span) of your area.

To change the tuning zone:

1 Press the ON/STAND-BY button to enter the stand-by mode.
2 Set the SPAN SELECTOR switch (on the rear panel) as follows.
   - For 50 kHz FM interval (9 kHz in AM) → 50/9
   - For 100 kHz FM interval (10 kHz in AM) → 100/10
3 Whilst pressing down the ► button and the MONSTER-BASS button, press the ON/STAND-BY button until "CLEAR AL" appears.

Caution:
This operation will erase all data stored in memory including clock, timer settings, tuner preset, and CD programme.

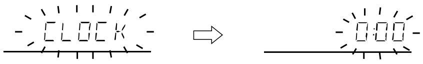
Setting the Clock



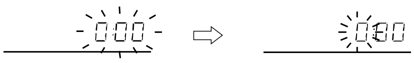
In this example, the clock is set for the 24-hour (0:00) display.

1 **Press the ON/STAND-BY button to turn the power on.**

2 **Press the CLOCK button and within 5 seconds, press the MEMORY/SET button.**



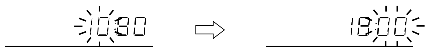
3 **Press the TUNING/TIME (∨ or ∧) button to select 24-hour or 12-hour display and then press the MEMORY/SET button.**



"0:00"	→	The 24-hour display will appear. (0:00 - 23:59)
"AM 12:00"	→	The 12-hour display will appear. (AM 12:00 - PM 11:59)
"AM 0:00"	→	The 12-hour display will appear. (AM 0:00 - PM 11:59)

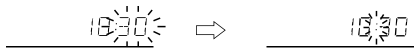
Note that this can only be set when the unit is first installed or it has been reset.

4 **Press the TUNING/TIME (∨ or ∧) button to adjust the hour and then press the MEMORY/SET button.**



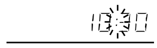
- Press the TUNING/TIME (∨ or ∧) button once to advance the time by 1 hour. Hold it down to advance continuously.
- When the 12-hour display is selected, "AM" will change automatically to "PM".

5 **Press the TUNING/TIME (∨ or ∧) button to adjust the minutes and then press the MEMORY/SET button.**



- Press the TUNING/TIME (∨ or ∧) button once to advance the time by 1 minute. Hold it down to change the time in 5-minute intervals.
- The hour will not advance even if minutes advance from "59" to "00".
- The clock begins counting from "0" seconds. (Seconds are not displayed.) The time display will disappear after a few seconds.

To confirm the time display:
Press the CLOCK button.
The time display will appear for about 5 seconds.



Note:
The "CLOCK" or time will flash at the push of the CLOCK button when the AC power supply is restored after a power failure or unplugging the unit.
Readjust the clock as follows.

To readjust the clock:
Perform "Setting the Clock" from the beginning. If the time display is flashing, step 3 (for selecting the 24-hour or 12-hour display) will be skipped.

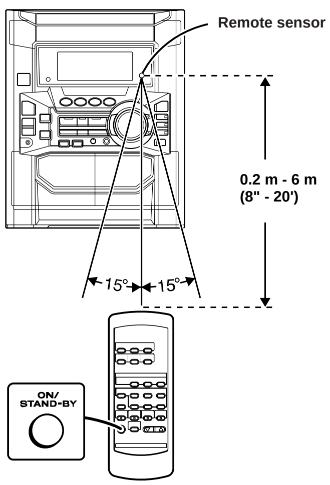
To change the 24-hour or 12-hour display:
1 Clear all the programmed contents.
2 Perform "Setting the Clock" from the beginning.

Remote Control

■ Test of the remote control

Face the remote control directly to the remote sensor on the unit.

The remote control can be used within the range shown below:
Press the ON/STAND-BY button. Does the power turn on? Now, you can enjoy the music.



Troubleshooting Chart

Many potential problems can be resolved by the owner without calling a service technician.
If something is wrong with this product, check the following before calling your authorised SHARP dealer or service centre.

■ General

Symptom	Possible cause
• The clock is not on time.	• Did a power failure occur? Reset the clock.
• When a button is pressed, the unit does not respond.	• Set this unit to the power stand-by mode and then turn it back on. • If the unit still malfunctions, reset it.
• No sound is heard.	• Is the volume level set to "0"? • Are the headphones connected? • Are the speaker wires disconnected? • Is the karaoke mode set to "L-CH", "R-CH" or "V-CANCEL"?

■ CD player

Symptom	Possible cause
• Playback does not start. • Playback stops in the middle or is not performed properly.	• Is the disc loaded upside down? • Does the disc satisfy the standards? • Is the disc distorted or scratched?
• Playback sounds are skipped, or stopped in the middle of a track.	• Is the unit located near excessive vibrations? • Is the disc very dirty? • Has condensation formed inside the unit?

■ Tuner

Symptom	Possible cause
• Radio makes unusual noise consecutively.	• Is the unit placed near the TV or computer? • Is the FM aerial or AM loop aerial placed properly? Move the AC power lead away from the aerial if located near.

■ Cassette deck

Symptom	Possible cause
• Cannot record.	• Is the erase-prevention tab removed?
• Cannot record tracks with proper sound quality. • Cannot erase completely.	• Is it a normal tape? (You cannot record on a metal or CrO_2 tape.)
• Sound skipping. • Cannot hear treble. • Sound fluctuation.	• Is there any slack? • Is the tape stretched? • Are the capstans, pinch rollers, or heads dirty?
• Cannot remove the tape.	• If a power failure occurs during playback, the heads remain engaged with the tape. Do not open the compartment forcibly. Wait until electricity resumes.

■ Karaoke

Symptom	Possible cause
• The vocal part of a multiplexed disc is not heard.	• Is the karaoke mode set to "L-CH", "R-CH" or "V-CANCEL"?

■ Remote control

Symptom	Possible cause
• The remote control does not operate.	• Is the AC power lead of the unit plugged in? • Is the battery polarity respected? • Are the batteries dead? • Is the distance or angle incorrect? • Does the remote control sensor receive strong light?

Troubleshooting Chart

■ If trouble occurs

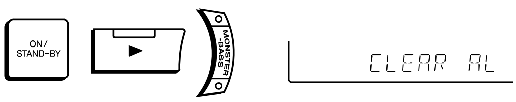
When this product is subjected to strong external interference (mechanical shock, excessive static electricity, abnormal supply voltage due to lightning, etc.) or if it is operated incorrectly, it may malfunction.

If such a problem occurs, do the following:
1 Set the unit to the stand-by mode and turn the power on again.
2 If the unit is not restored in the previous operation, unplug and plug in the unit, and then turn the power on.

Note:
If neither operation above restores the unit, clear all the memory by resetting it.

■ Clearing all the memory (reset)

1 Press the ON/STAND-BY button to enter the power stand-by mode.
2 Whilst pressing down the ► button and the MONSTER-BASS button, press the ON/STAND-BY button until "CLEAR AL" appears.



Caution:
This operation will erase all data stored in memory including clock, timer settings, tuner preset, and CD programme.

■ Before transporting the unit

1 Press the ON/STAND-BY button to turn the power on.
2 Press the CD button.
3 Press the ⏏ OPEN/CLOSE button to open the disc tray.
Remove all CDs inserted in the unit.
4 Press the ⏏ OPEN/CLOSE button to close the disc tray.
Make sure that "NO DISC" is displayed.
5 Press the ON/STAND-BY button to enter the stand-by mode, and then unplug the AC power lead from the wall socket.

DISASSEMBLY

Caution on Disassembly

Follow the below-mentioned notes when disassembling the unit and reassembling it, to keep it safe and ensure excellent performance:

1. Take cassette tape and compact disc out of the unit.
2. Be sure to remove the power supply plug from the wall outlet before starting to disassemble the unit.
3. Take off nylon bands or wire holders where they need to be removed when disassembling the unit. After servicing the unit, be sure to rearrange the leads where they were before disassembling.
4. Take sufficient care on static electricity of integrated circuits and other circuits when servicing.

CD-M4000W

STEP	REMOVAL	PROCEDURE	FIGURE
1	Top Cabinet	1. Screw .... (A1) x4	9-1
2	Side Panel (Left/Right)	1. Screw .... (B1) x8	9-1
3	CD Player Unit/ CD Tray Cover	1. Turn on the power supply, open the disc tray, take out the CD tray cover, and close. (Note 1) 2. Screw .... (C1) x1 3. Hook .... (C2) x3 4. Hook .... (C3) x2 5. Socket .... (C4) x2	9-2
4	Rear Panel with Fan Motor	1. Screw .... (D1) x10 2. Socket .... (D2) x1	9-2
5	Main PWB	1. Screw .... (E1) x1 2. Flat Cable .... (E2) x1 3. Socket .... (E3) x4	9-2 10-2 10-2,10-3
6	Amp. PWB	1. Screw .... (F1) x7 2. Socket .... (F2) x2 3. PWB Holder .... (F3) x3 4. Flat Wire................... (F4) x1	10-3 10-2 10-3
7	Front Panel	1. Screw ....(G1) x1 2. Socket ....(G2) x1 2. Hook ....(G3) x2	10-3
8	Display PWB	1. Knob ....(H1) x1 2. Screw .... (H2) x12 3. Flat Cable .... (H3) x1	10-4
9	Tape Mechanism	1. Open the cassette holder. 2. Screw (J1) x5	10-4
10	Headphones PWB	1. Screw .... (K1) x1	10-4
11	Mic PWB	1. Screw .... (L1) x2	10-4
12	Turntable	1. Hook .... (M1) x2 2. Cover .... (M2) x1	10-5
13	Disc Tray	1. Turn fully the lock lever in the . arrow direction. 2. While holding the lock lever,rotate the cam gear until the cam gear rib engages with the clamp lever. 3. Push the slide chassis backward to engage the claw with the groove and remove it in the direction of the arrow. .... (N1) x6	9-3 10-1 10-6
14	CD Servo PWB (Note 2)	1. Screw .... (P1) x1 2. Hook .... (P2) x2 3. Socket .... (P3) x4	11-1
15	CD Mechanism	1. Hook ....(Q1) x2 2. Hook ....(Q2) x3	11-2

Note 1: How to open the changer manually. (Fig. 9-3)

1. In this state, turn fully the lock lever in the arrow direction through the hole on the loading chaissis bottom.
2. While holding the lock lever, rotate the cam gear anticlockwise until the cam gear rib engages with the clamp lever. (Fig. 10-1)
3. After that, push forward the slide Chaissis.

CD-M4000W

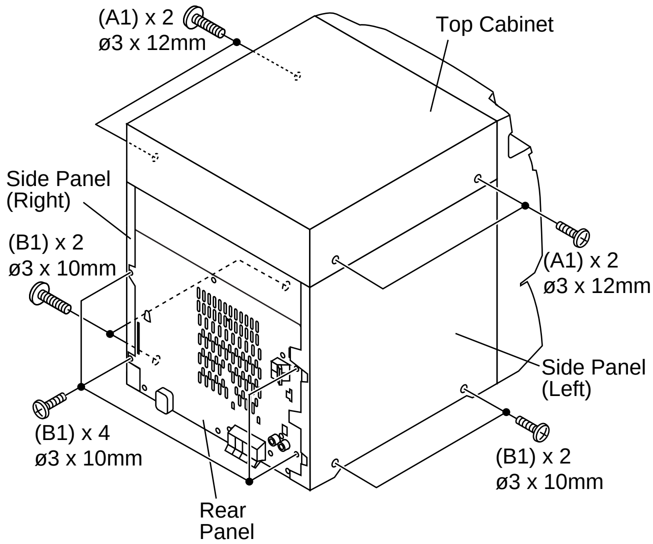


Figure 9-1

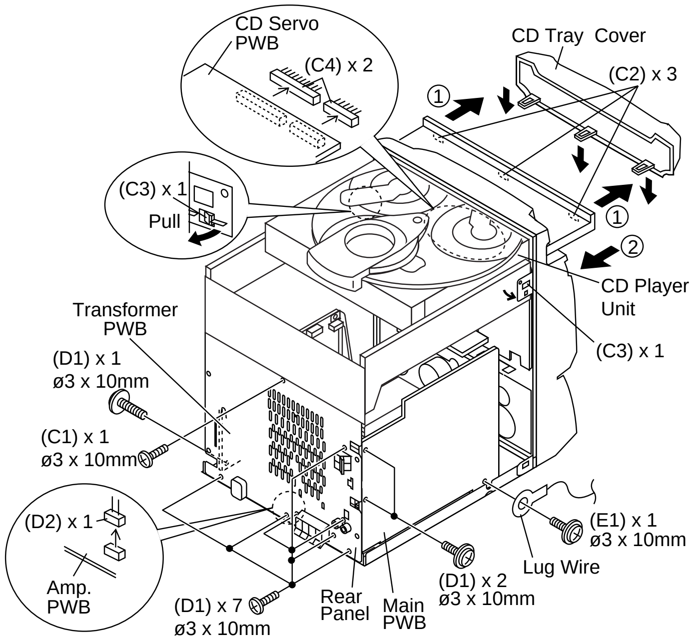


Figure 9-2

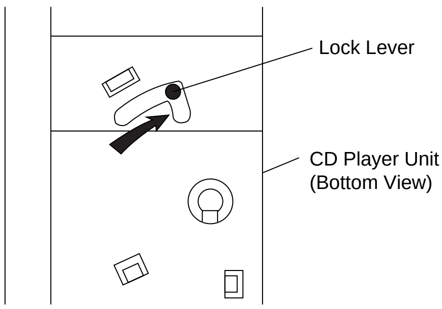


Figure 9-3

Note 2:

1. After removing the connector for the optical pickup from the connector, wrap the conductive aluminium foil around the front end of the connector so as to protect the optical pickup from electro-static damage.

Note 3:

1. Be careful not to break the claw of the CD mechanism.
2. When fining back the cam gear assembly, let it lock by front movement.

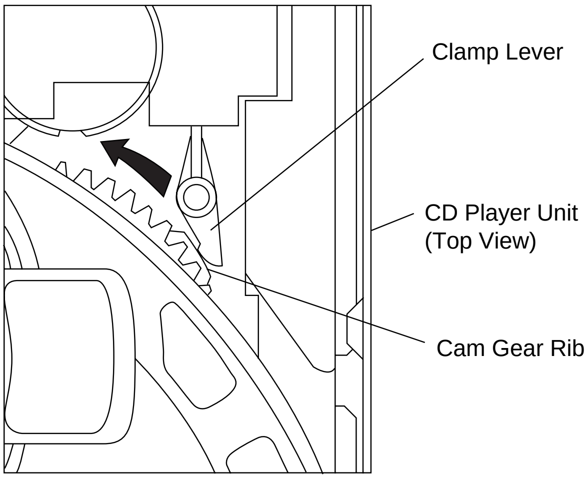


Figure 10-1

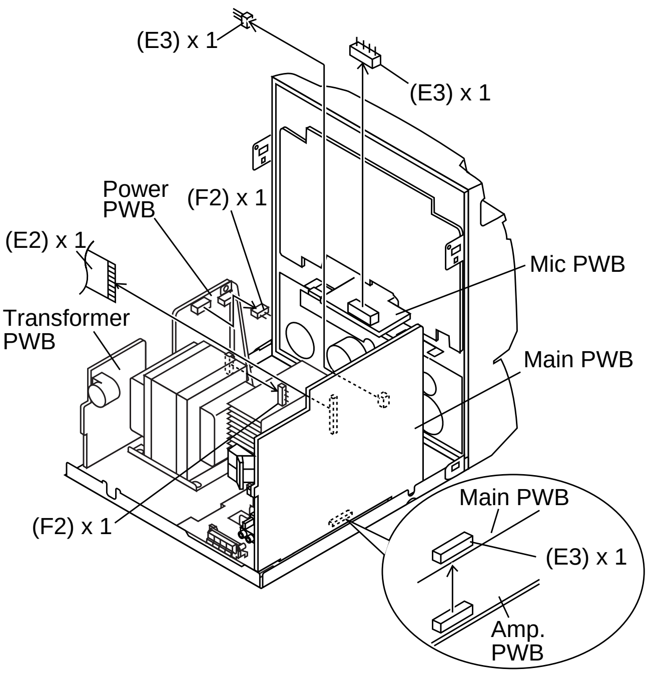


Figure 10-2

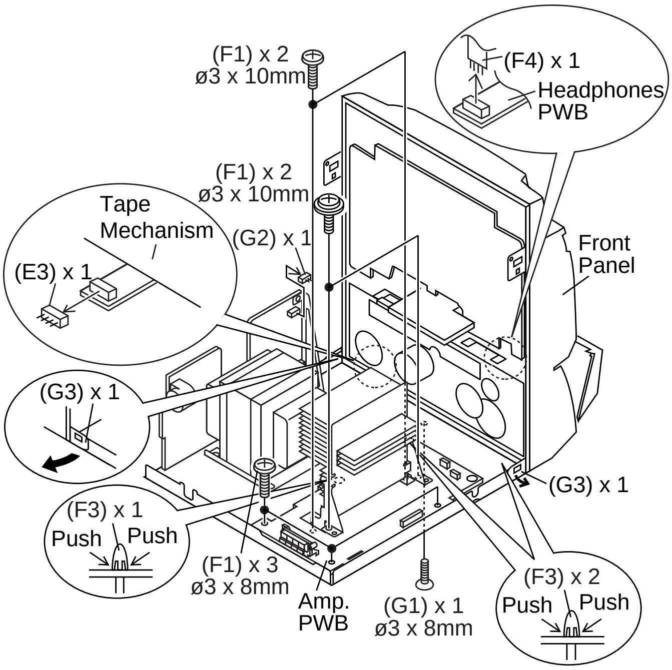


Figure 10-3

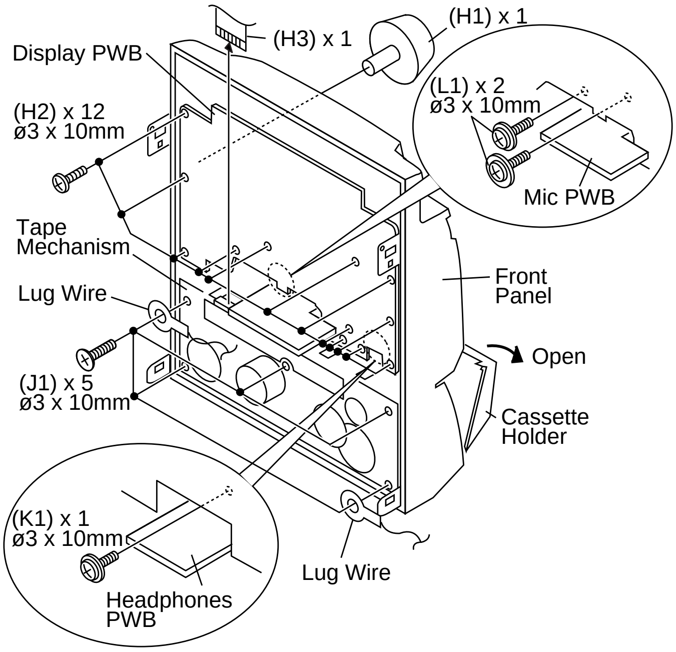


Figure 10-4

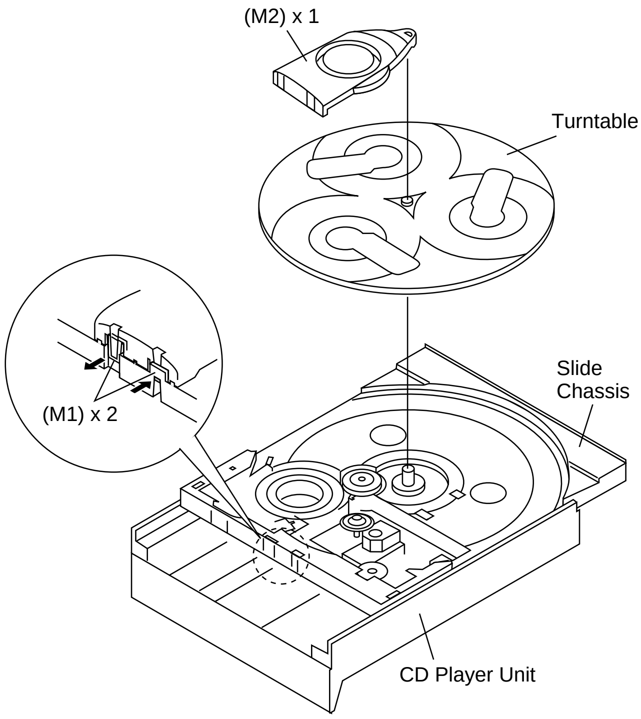


Figure 10-5

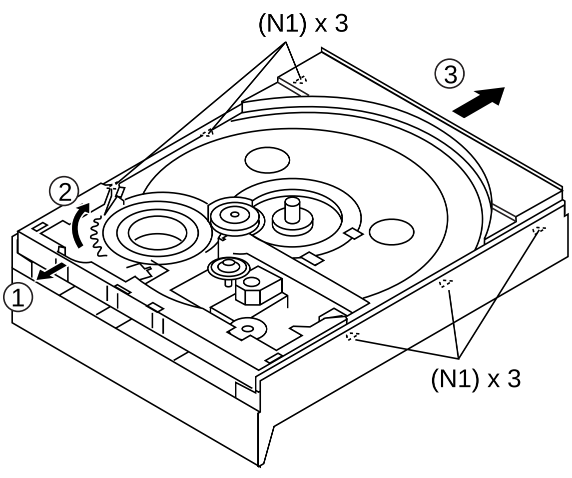


Figure 10-6

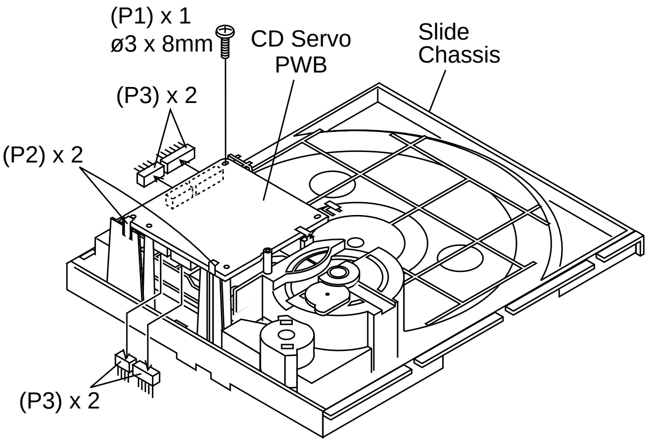


Figure 11-1

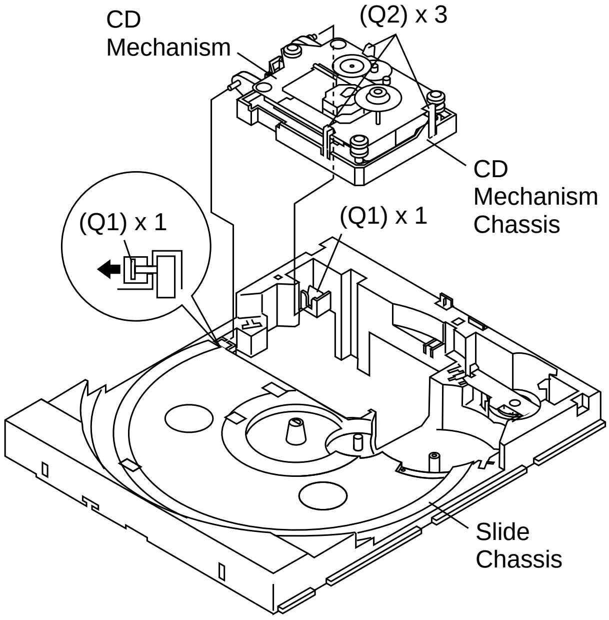


Figure 11-2

CP-M4000

STEP	REMOVAL	PROCEDURE	FIGURE
1	Front Panel	1. Net .... (A1) x1 2. Catching Holder ..... (A2) x4 3. Screw .... (A3) x4	11-3,11-4
2	Super Tweeter	1. Screw .... (B1) x2	11-5
3	Woofer	1. Screw .... (C1) x4	11-5
4	Tweeter	1. Screw .... (D1) x4	11-5
5	Midrange	1. Screw .... (E1) x4	11-5

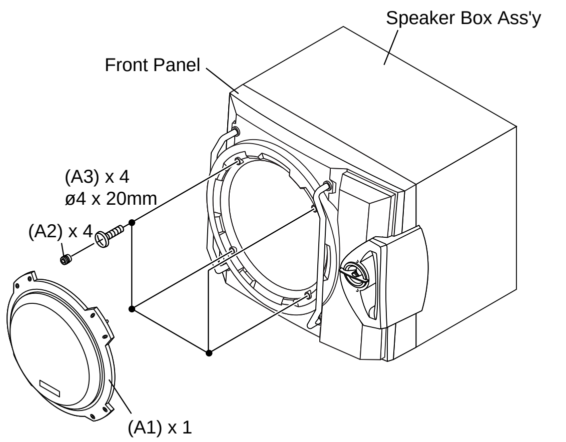


Figure 11-3

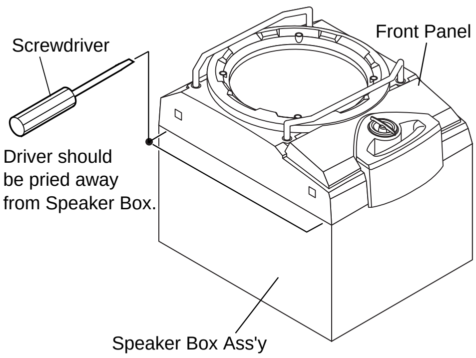


Figure 11-4

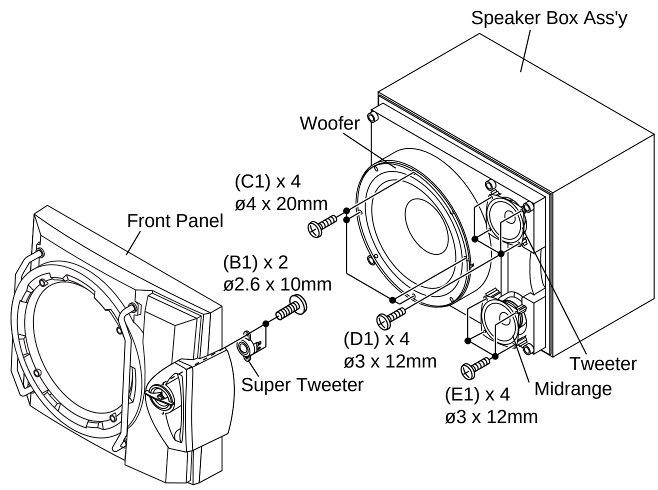


Figure 11-5

REMOVING AND REINSTALLING THE MAIN PARTS

TAPE MECHANISM SECTION

Perform steps 1 to 7 and 9 of the disassembly method to remove the tape mechanism.

How to remove the record/playback and erase heads (TAPE 2) (See Fig. 12-1)

1. When you remove the screws (A1) x 2 pcs., the recording/ playback head and three-dimensional head of the erasing head can be removed.

How to remove the playback head (TAPE 1) (See Fig. 12-2)

1. When you remove the screws (B1) x 2 pcs., the playback head.

How to remove the pinch roller (TAPE 1/2) (See Fig. 12-3)

1. Carefully bend the pinch roller pawl in the direction of the arrow **<A>**, and remove the pinch roller (C1) x 1 pc., in the direction of the arrow **<B>**.

Note:
When installing the pinch roller, pay attention to the spring mounting position.

How to remove the belt (TAPE 2) (See Fig. 12-4)

1. Remove the main belt (D1) x 1 pc., from the motor side.
2. Remove the FF/REW belt (D2) x 1 pc.

How to remove the belt (TAPE 1) (See Fig. 12-4)

1. Remove the main belt (E1) x 1 pc., from the motor side.
2. Remove the FF/REW belt (E2) x 1 pc.

How to remove the motor (See Fig. 12-5)

1. Remove the screws (F1) x 2 pcs., to remove the motor.

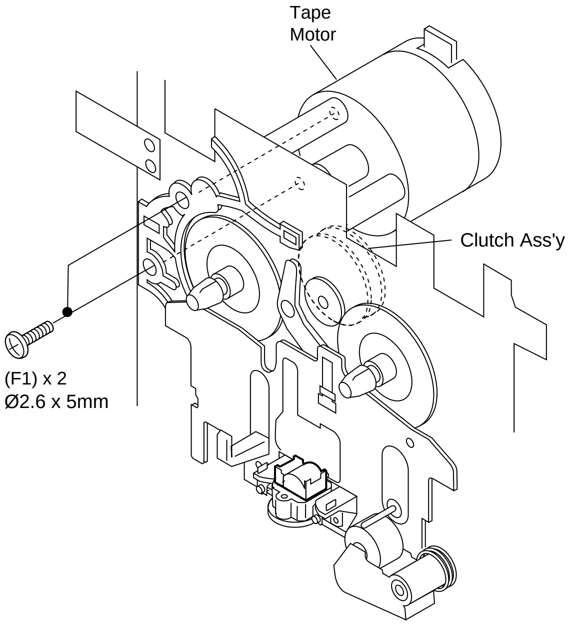


Figure 12-5

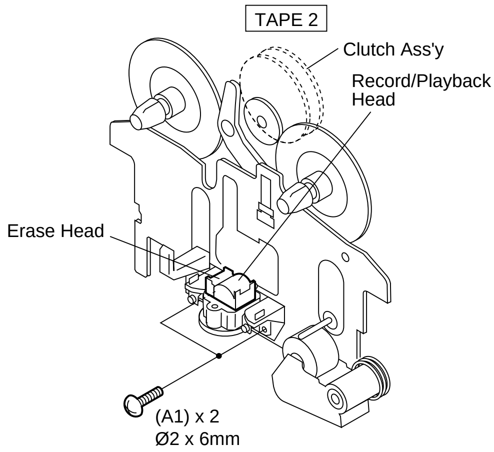


Figure 12-1

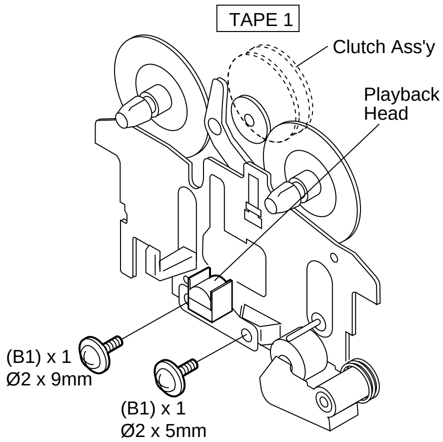


Figure 12-2

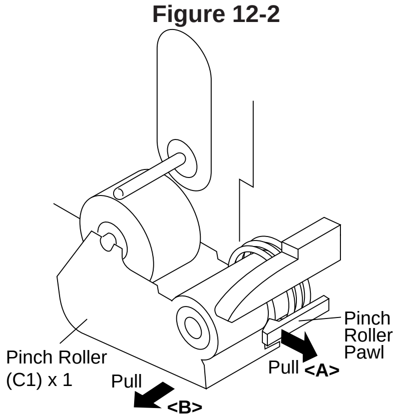


Figure 12-3

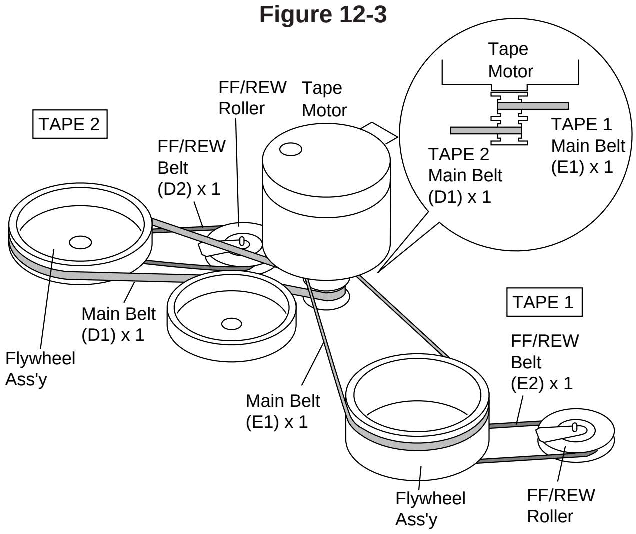


Figure 12-4

CD MECHANISM SECTION

Perform steps 1, 2, 3, 12, 13, 14 and 15 of the disassembly method to remove the CD mechanism.

How to remove the CD loading motor (See Fig. 13-1)

1. Bend the hooks (A1) x 5 pcs., to remove the CD loading motor.
2. Remove the drive belt (A2) x 1 pc.

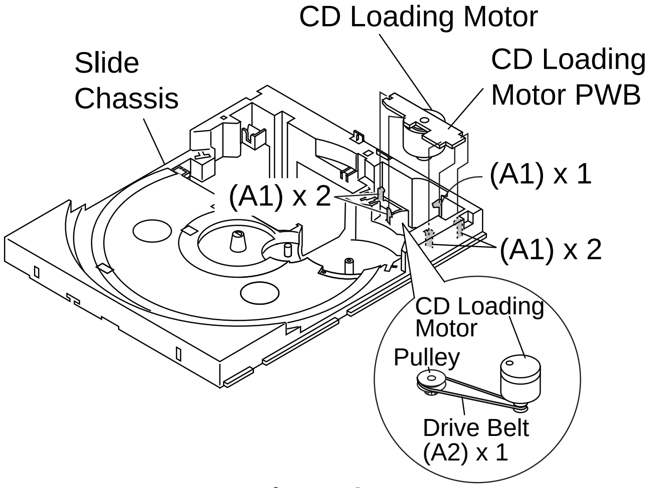


Figure 13-1

How to remove the pickup (See Fig. 13-2)

1. Remove the stop washer (B1) x 1 pc., to remove the gear (B2) x 1 pc.
2. Remove the screws (B3) x 2 pcs., to remove the shaft (B4).
3. Remove the pickup.

Note
After removing the connector for the optical pickup from the connector wrap the conductive aluminium foil around the front end of connector so as to protect the optical pickup from electrostatic damage.

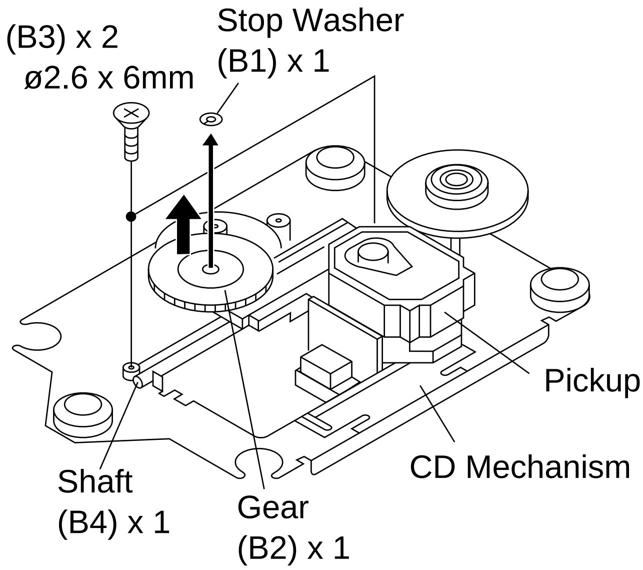


Figure 13-2

ADJUSTMENT

MECHANISM SECTION

• **Driving Force Check**

Torque Meter	Specified Value
Play: TW-2111	Tape 1: Over 80 g Tape 2: Over 80 g

• **Torque Check**

Torque Meter	Specified Value	
	Tape 1	Tape 2
Play: TW-2111	30 to 80 g.cm	30 to 80 g.cm
Fast forward: TW-2231	—	70 to 180 g.cm
Rewind: TW-2231	—	70 to 180 g.cm

• **Tape Speed**

	Test Tape	Adjusting Point	Specified Value	Instrument Connection
Normal speed	MTT-111	Variable Resistor in motor.	3,000 ± 30 Hz	Speaker terminal (Load resistance: 6 ohms)

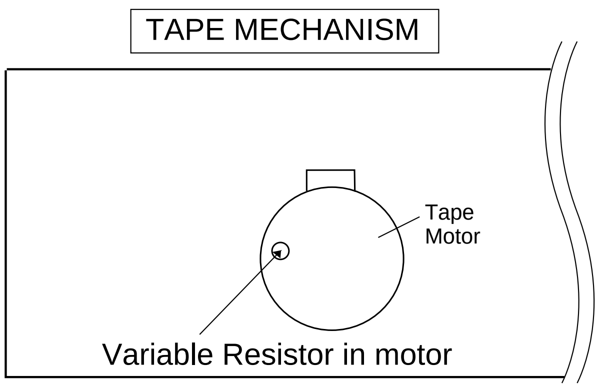


Figure 13-3

TUNER SECTION

fL: Low-range frequency
fH: High-range frequency

- **AM IF/RF**

Signal generator: 400 Hz, 30%, AM modulated

Test Stage	Frequency	Frequency Display	Setting/ Adjusting Parts	Instrument Connection
AM IF	450 kHz	1,602 kHz	T351	*1
AM Band Coverage	—	531 kHz	(fL): T306 1.1 ± 0.1 V	*2
AM Tracking	990 kHz	990 kHz	(fL): T303	*1

*1. Input: Antenna   Output: TP302
*2. Input: Antenna   Output: TP301

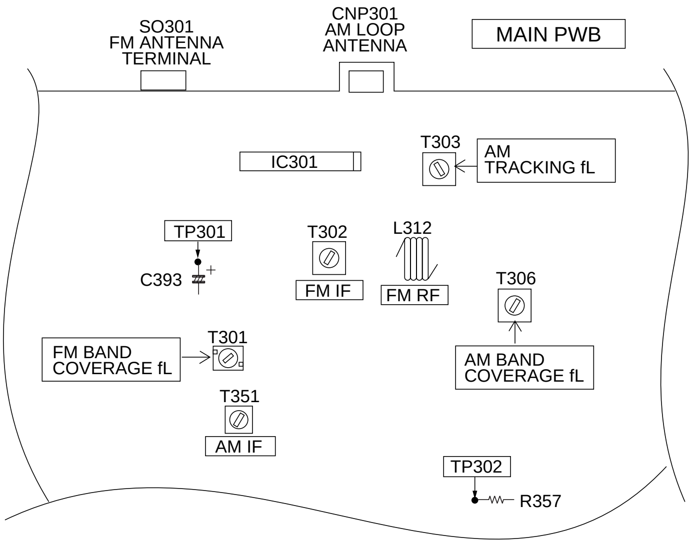


Figure 14-1 ADJUSTMENT POINTS

- **FM RF**

Signal generator: 1 kHz, 40 kHz dev., FM modulated

Test Stage	Frequency	Frequency Display	Setting/ Adjusting Point	Instrument Connection
FM Band Coverage	—	87.50 MHz	T301(fL): 1.3 V ± 50 mV	*1
FM RF	98.00 MHz (10-30 dB)	98.00 MHz	L312	*2

*1. Input: Antenna   Output: TP301
*2. Input: Antenna   Output: Speaker terminal

- **FM IF**

Signal generator: 10.7 MHz, FM modulated

Test Stage	Frequency	Frequency Display	Setting/ Adjusting Point	Instrument Connection
IF	10.7 MHz	98 MHz	T302 (Turn the core of transformer T302 fully counter-clock wise)	*1

*1. Input: Antenna   Output: TP301

CD SECTION

- **Adjustment**

Since this CD system incorporates the following automatic adjustment functions, readjustment is not needed when replacing the pickup. Therefore, different PWBs and pickups can be combined freely.

Each time a disc is changed, these adjustments are performed automatically. Therefore, playback of each disc can be performed under optimum conditions.

Items adjusted automatically

(1) Offset adjustment (The offset voltage between the head amplifier output and the VREF reference voltage is compensated inside the IC.)
  * Focus offset adjustment
  * Tracking offset adjustment

(2) Tracking balance adjustment (waveform drawing Fig.14-2 EFBL)

(3) Gain adjustment (The gain is compensated inside the IC so that the loop gain at the gain crossover frequency will be 0 dB.)
  * Focus gain adjustment
  * Tracking gain adjustment

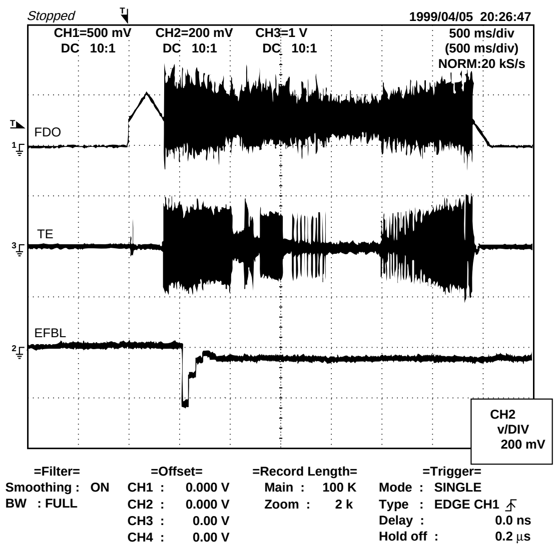
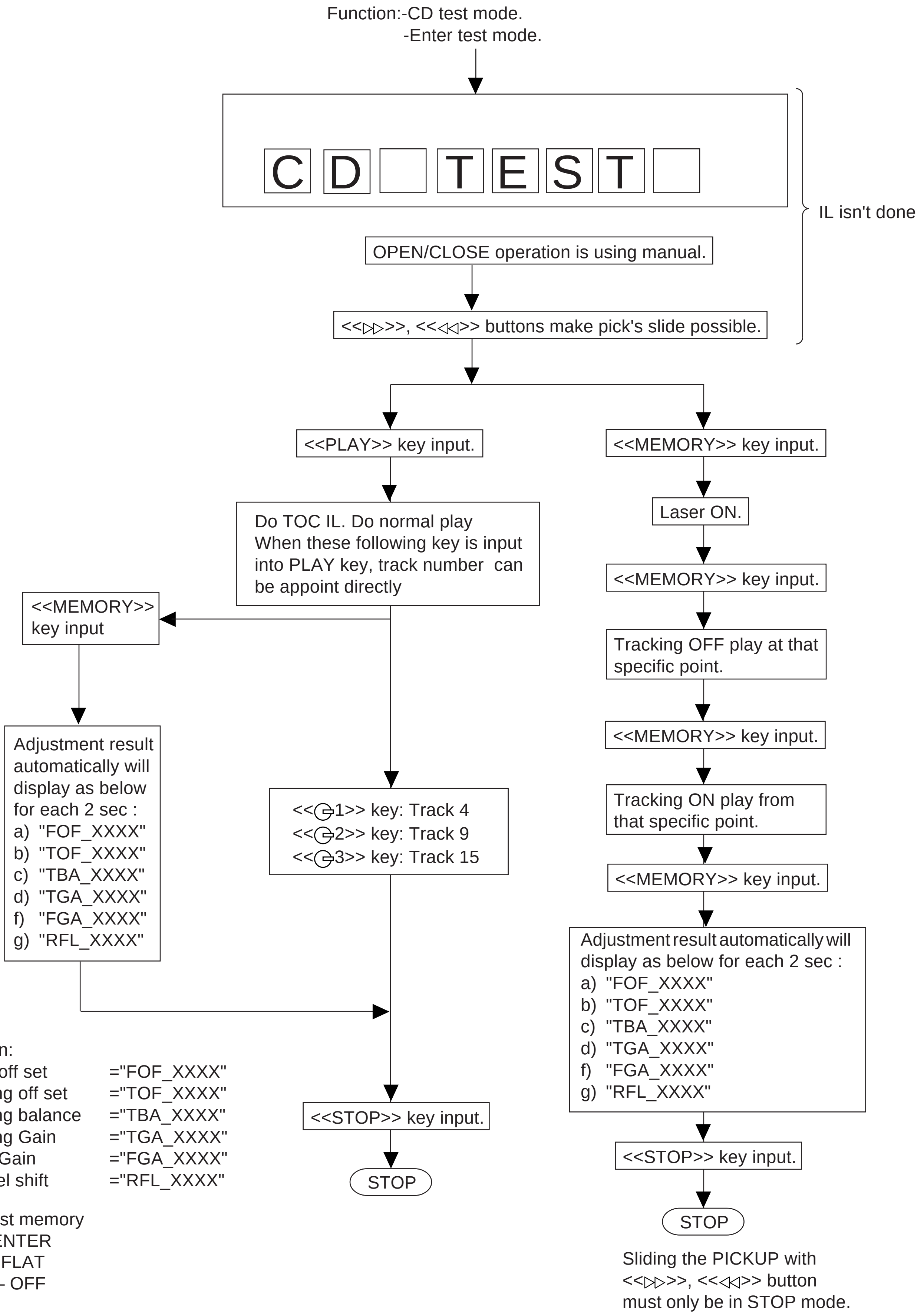


Figure 14-2

TEST MODE

- **Setting the test mode**

Any one of test mode can be set by pressing several keys as follows.
<X-BASS> + <CD> + <POWER> TEST:CD operation test



explanation:

a)	Focus off set	="FOF_XXXX"
b)	Tracking off set	="TOF_XXXX"
c)	Tracking balance	="TBA_XXXX"
d)	Tracking Gain	="TGA_XXXX"
f)	Focus Gain	="FGA_XXXX"
g)	RF level shift	="RFL_XXXX"

VOL — Last memory
BAL — CENTER
P.GEQ — FLAT
X-BASS — OFF

To cancel : Power OFF

Standard Specification of Stereo System Error Message Display Contents

Error Contents		Display	Notes
Output while Device Protection Operation		'PROTECT'	00: While in Protect Circuit Operate 01: Over Current Detection 02: DC Detection 03:
TAPE	Mechanism Error	'ER-TA**'	00: Tape Mechanism Error 01: Initial Error 02: 03:
CD/VCD	Pickup Mechanism Error	'ER-CD**'	00: Pickup Mechanism Error 01: PU-IN SW Detection NG 02: 03:
	CD Changer Mechanism Error	'ER-CD**'	10: Changer Error 11: Initial Error 12: 13:
	Tray Error	'ER-CD**'	20: Tray Error 21: 22: 23:
	Micon Communication Error	'ER-CD**'	30: System-VCD 31: System-CD Servo
	Focus Not Match	'NO DISC'	
	IL Time Over	'NOT READ'	
TUN	PLL Unlock	'ER-TU**'	00: TUN Error 01: PLL Unlock 02: 03:

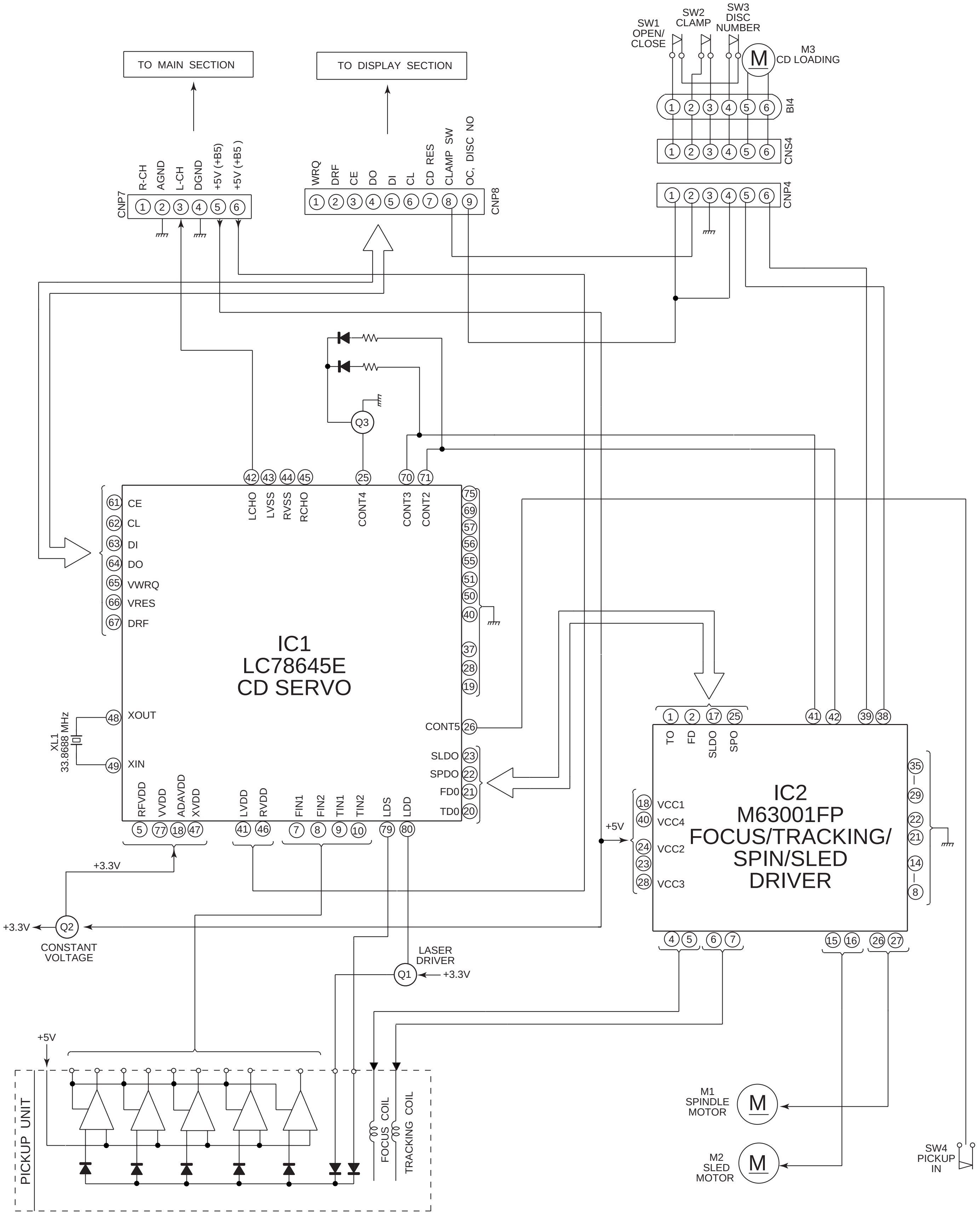


Figure 17 BLOCK DIAGRAM (1/3)

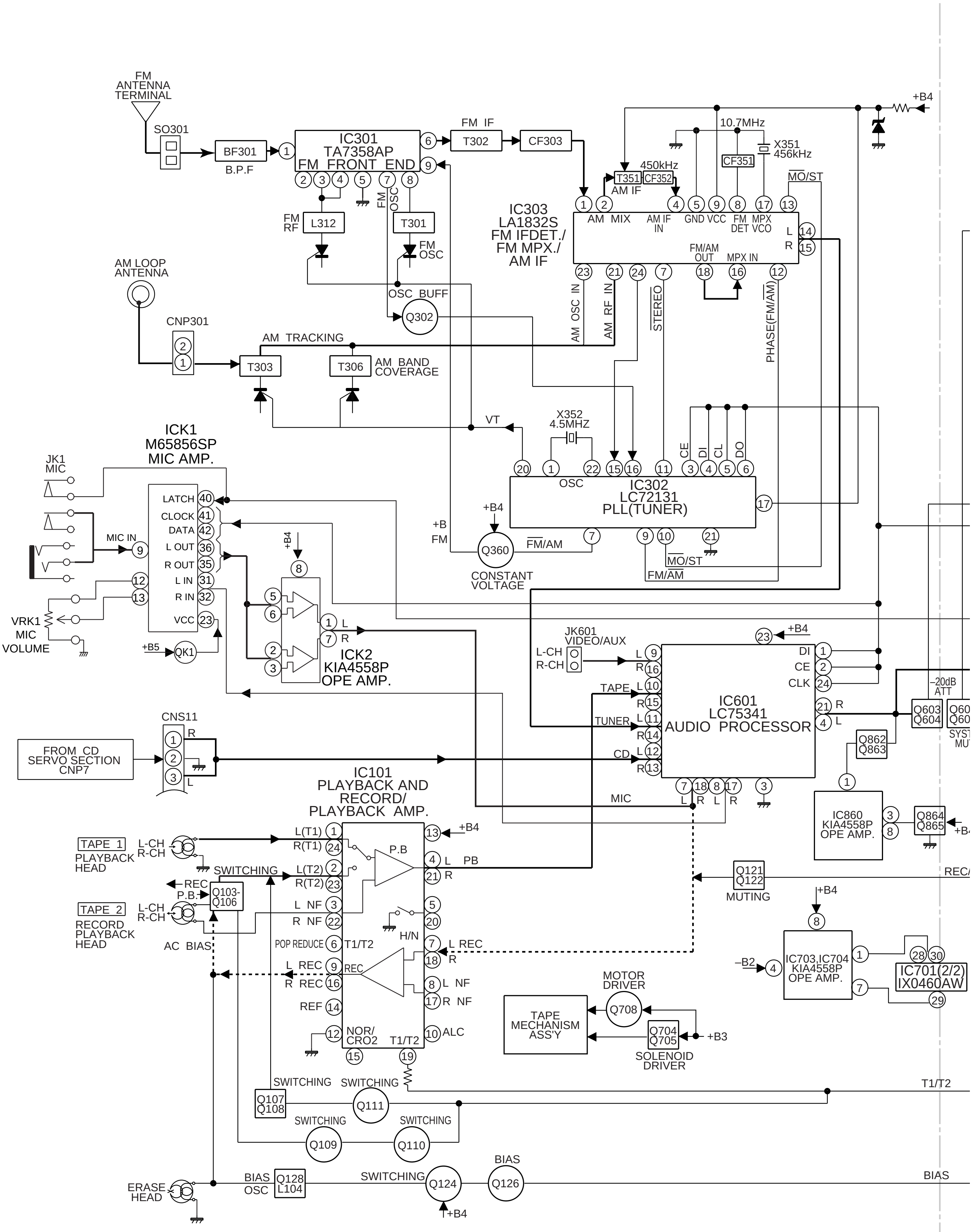


Figure 18 BLOCK DIAGRAM (2/3)

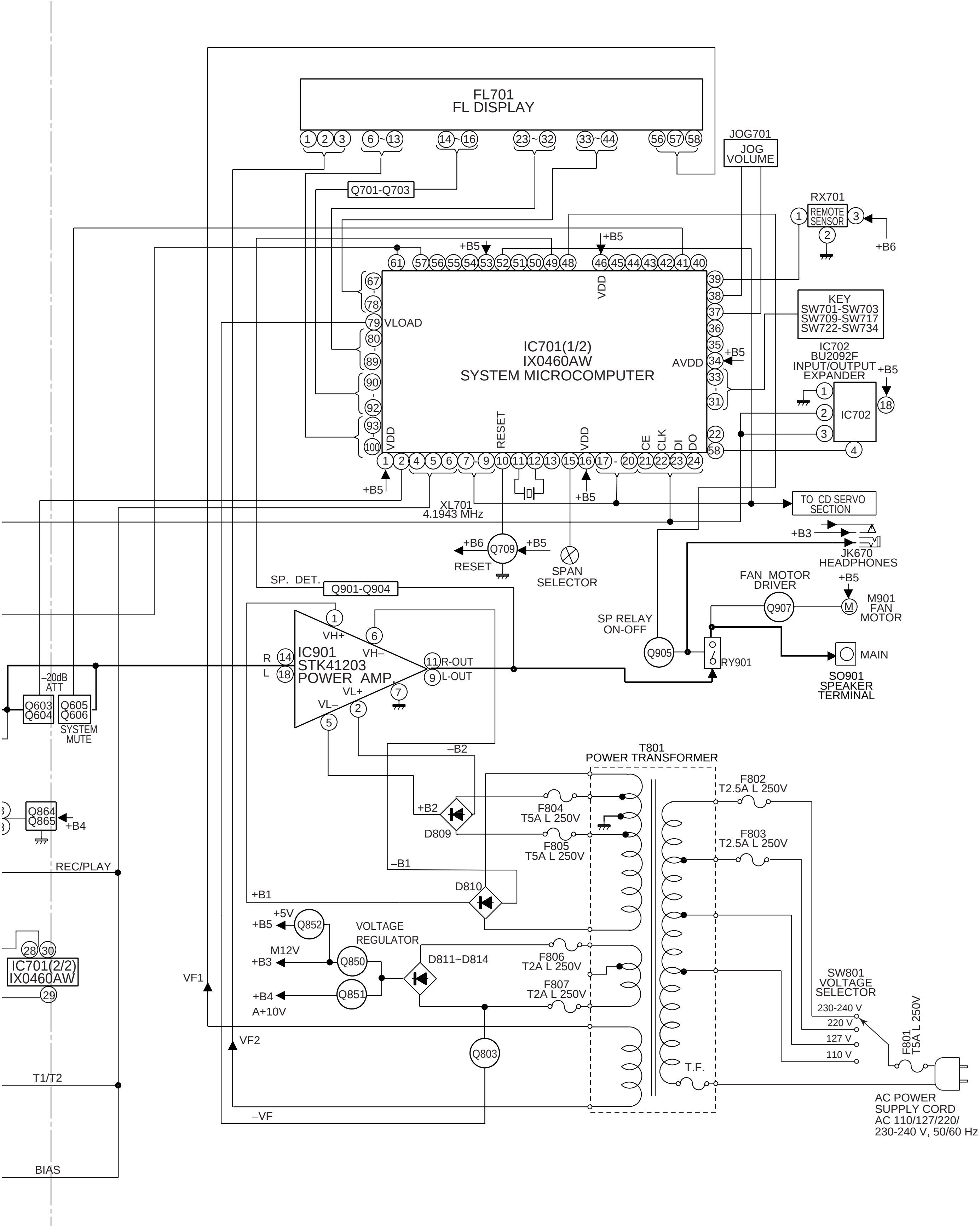
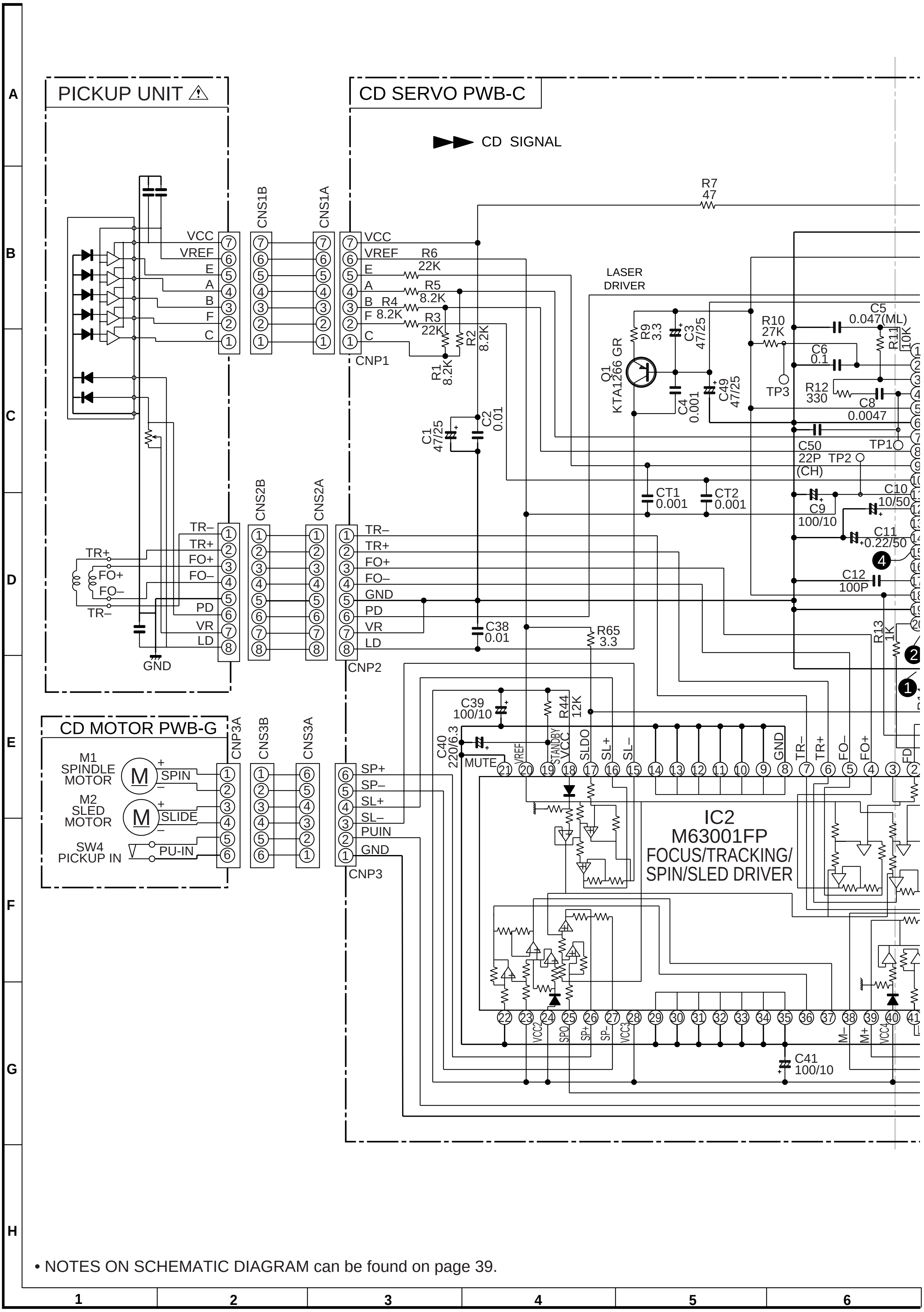
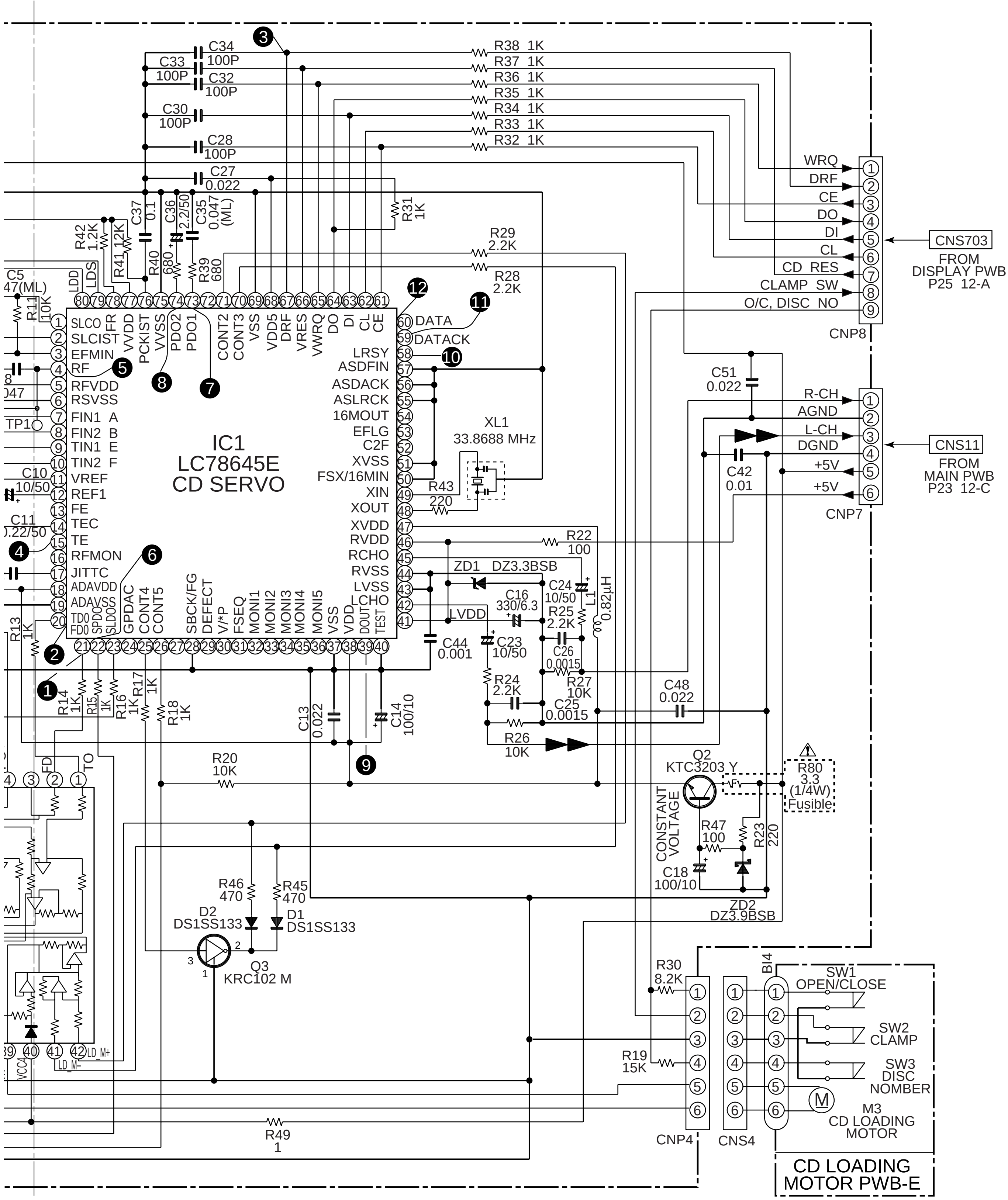


Figure 19 BLOCK DIAGRAM (3/3)



• NOTES ON SCHEMATIC DIAGRAM can be found on page 39.

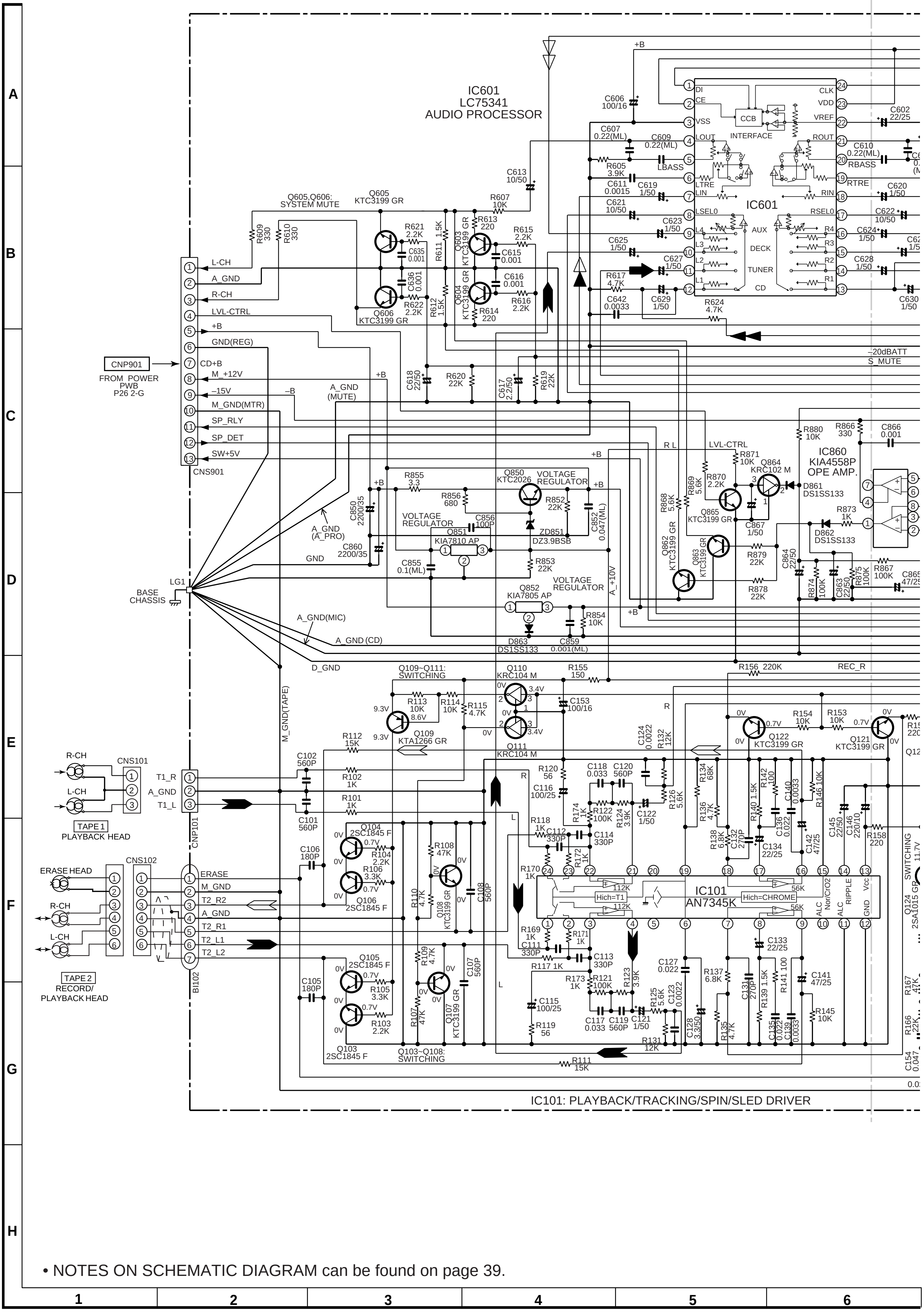
Figure 20 SCHEMATIC DIAGRAM (1/10)



• The numbers 1 to 12 are waveform numbers shown in page 40.

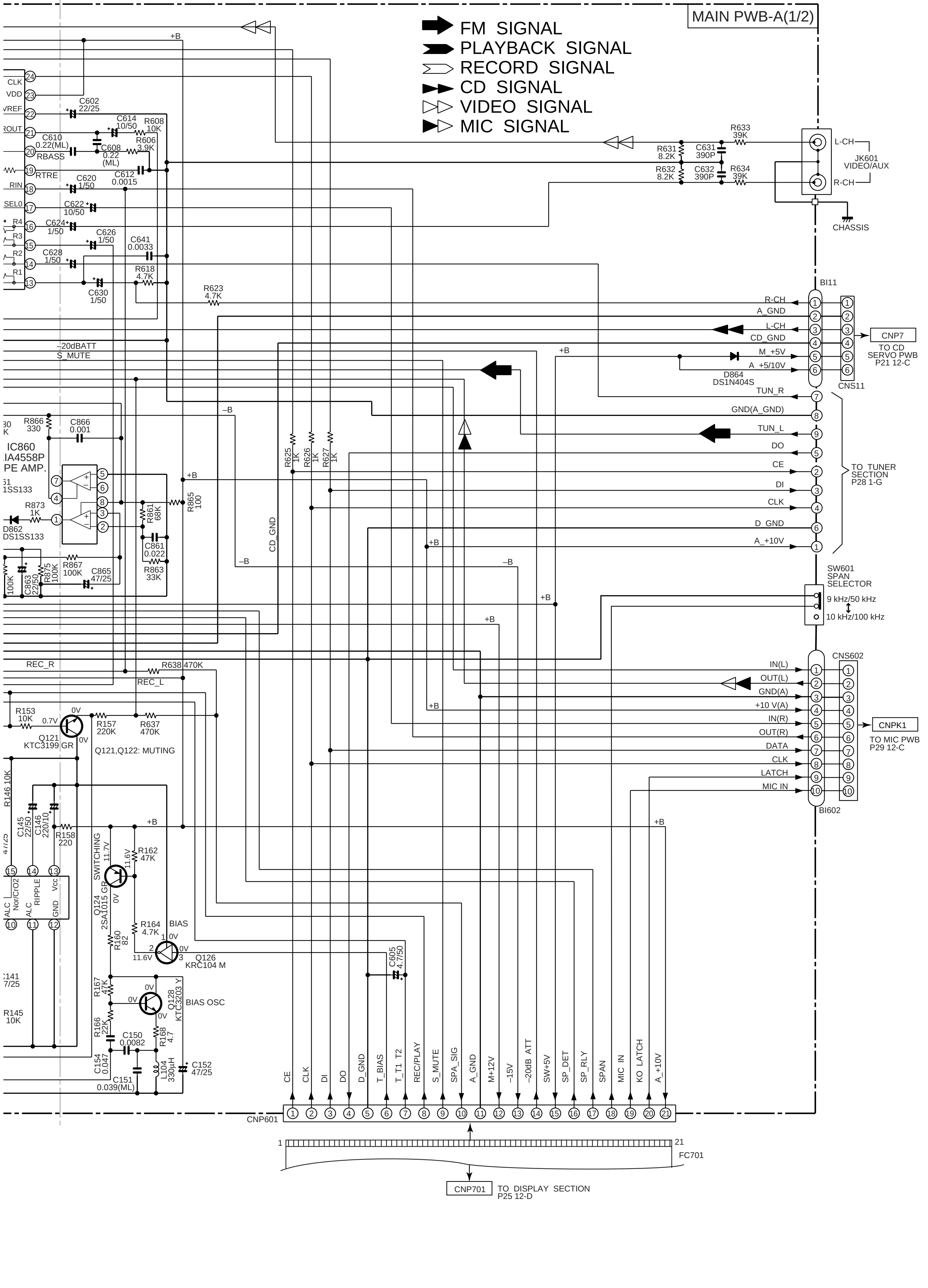
7	8	9	10	11	12

Figure 21 SCHEMATIC DIAGRAM (2/10)



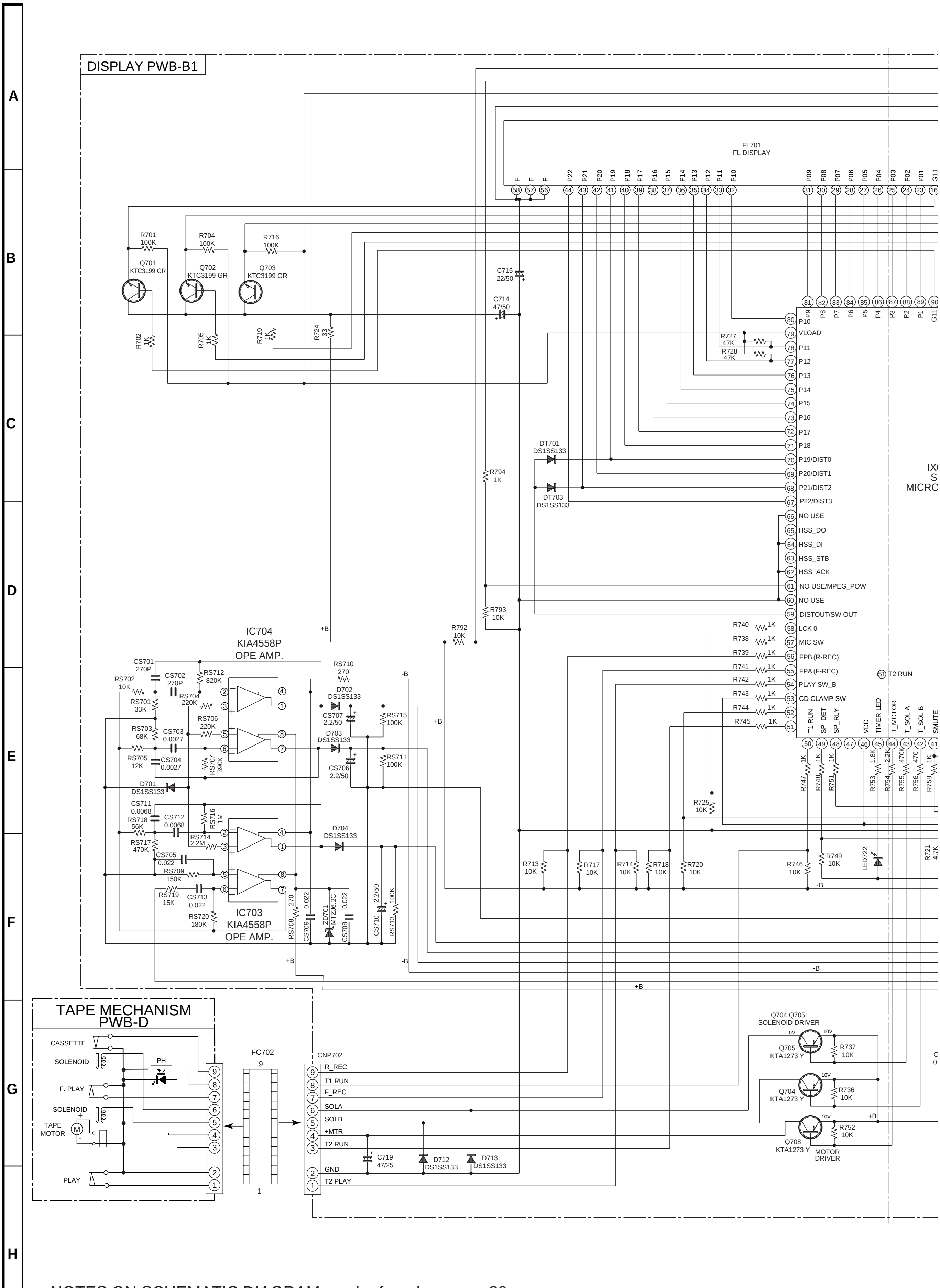
• NOTES ON SCHEMATIC DIAGRAM can be found on page 39.

Figure 22 SCHEMATIC DIAGRAM (3/10)



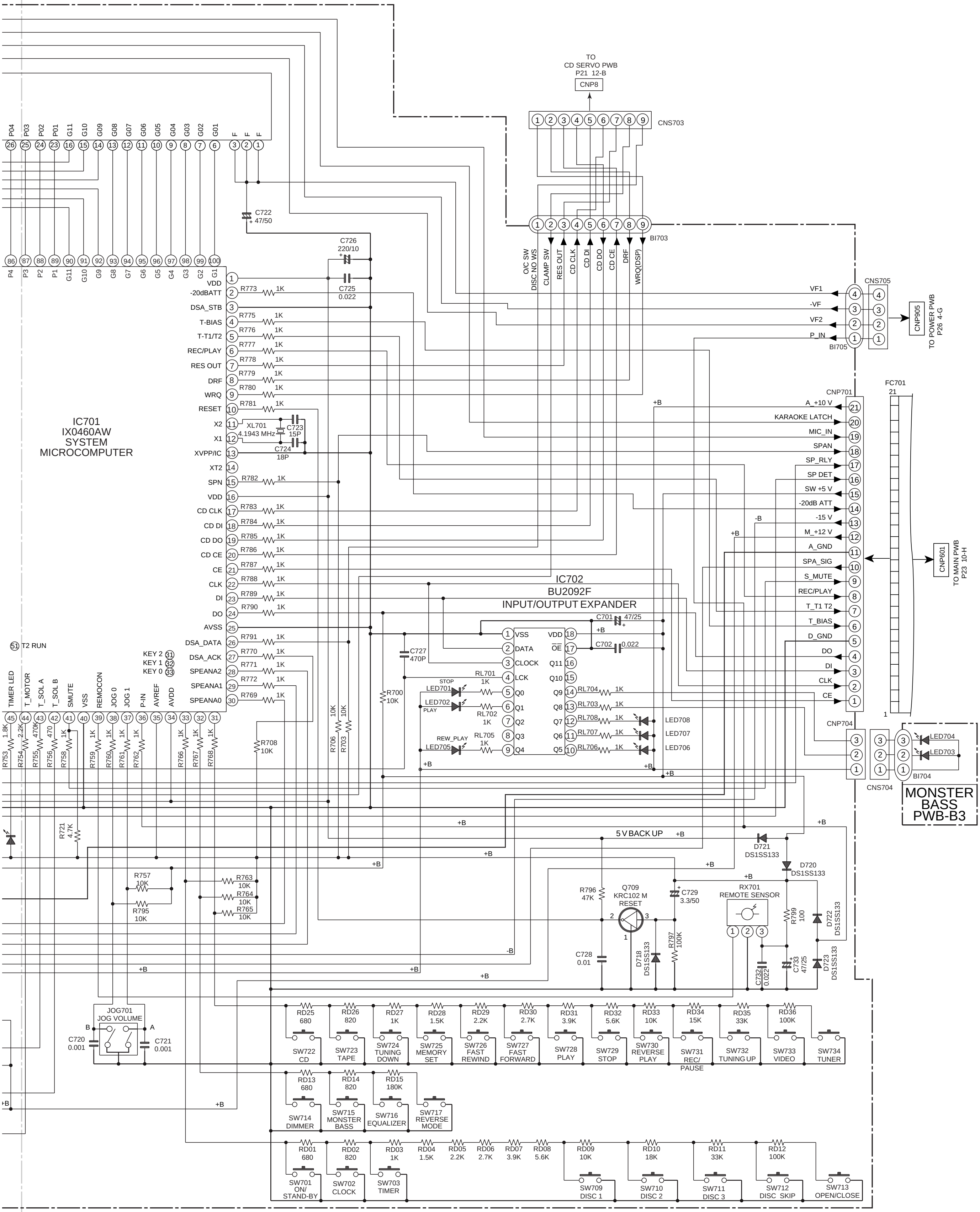
7	8	9	10	11	12

Figure 23 SCHEMATIC DIAGRAM (4/10)



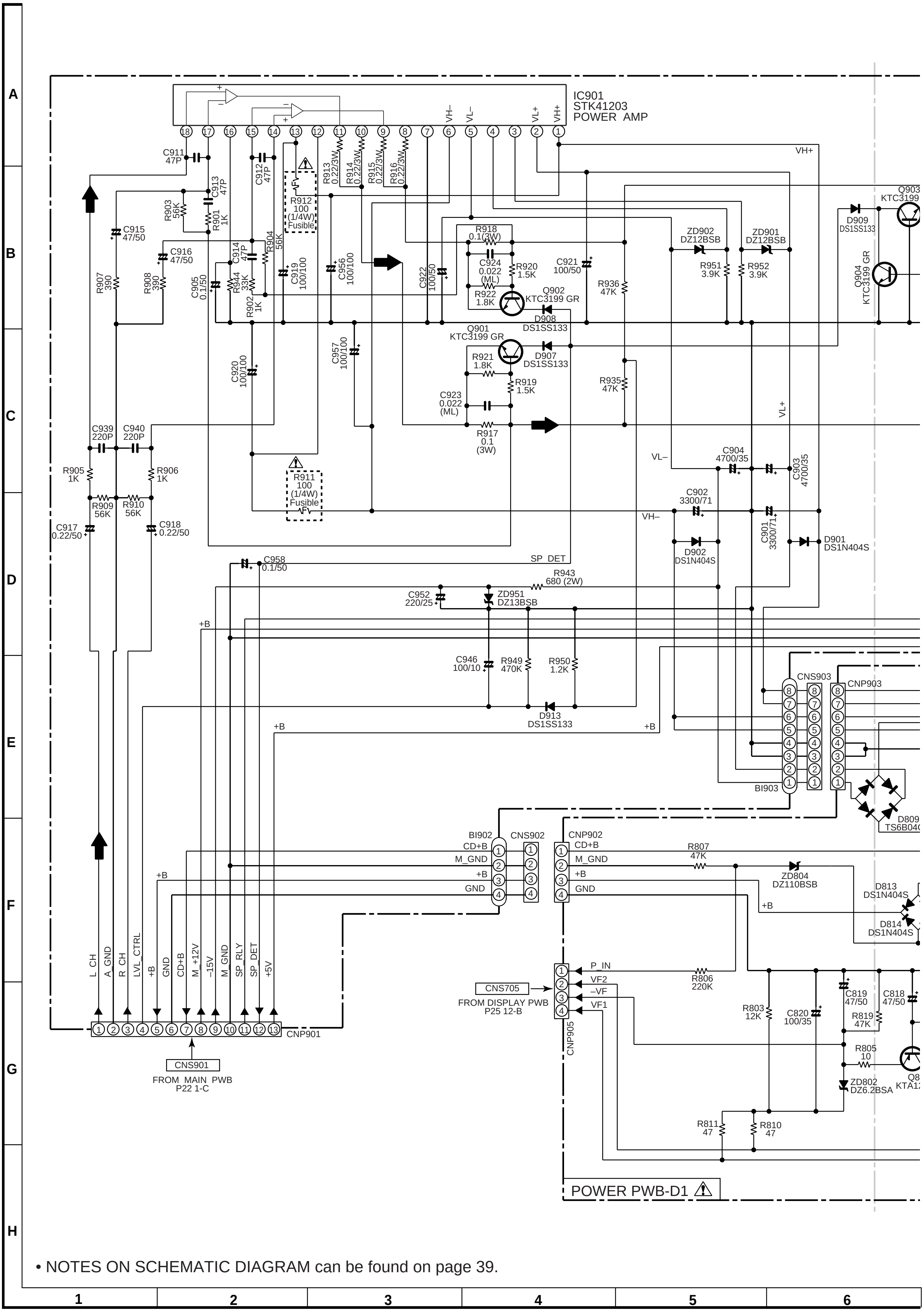
• NOTES ON SCHEMATIC DIAGRAM can be found on page 39.

Figure 24 SCHEMATIC DIAGRAM (5/10)



7	8	9	10	11	12

Figure 25 SCHEMATIC DIAGRAM (6/10)



• NOTES ON SCHEMATIC DIAGRAM can be found on page 39.

Figure 26 SCHEMATIC DIAGRAM (7/10)

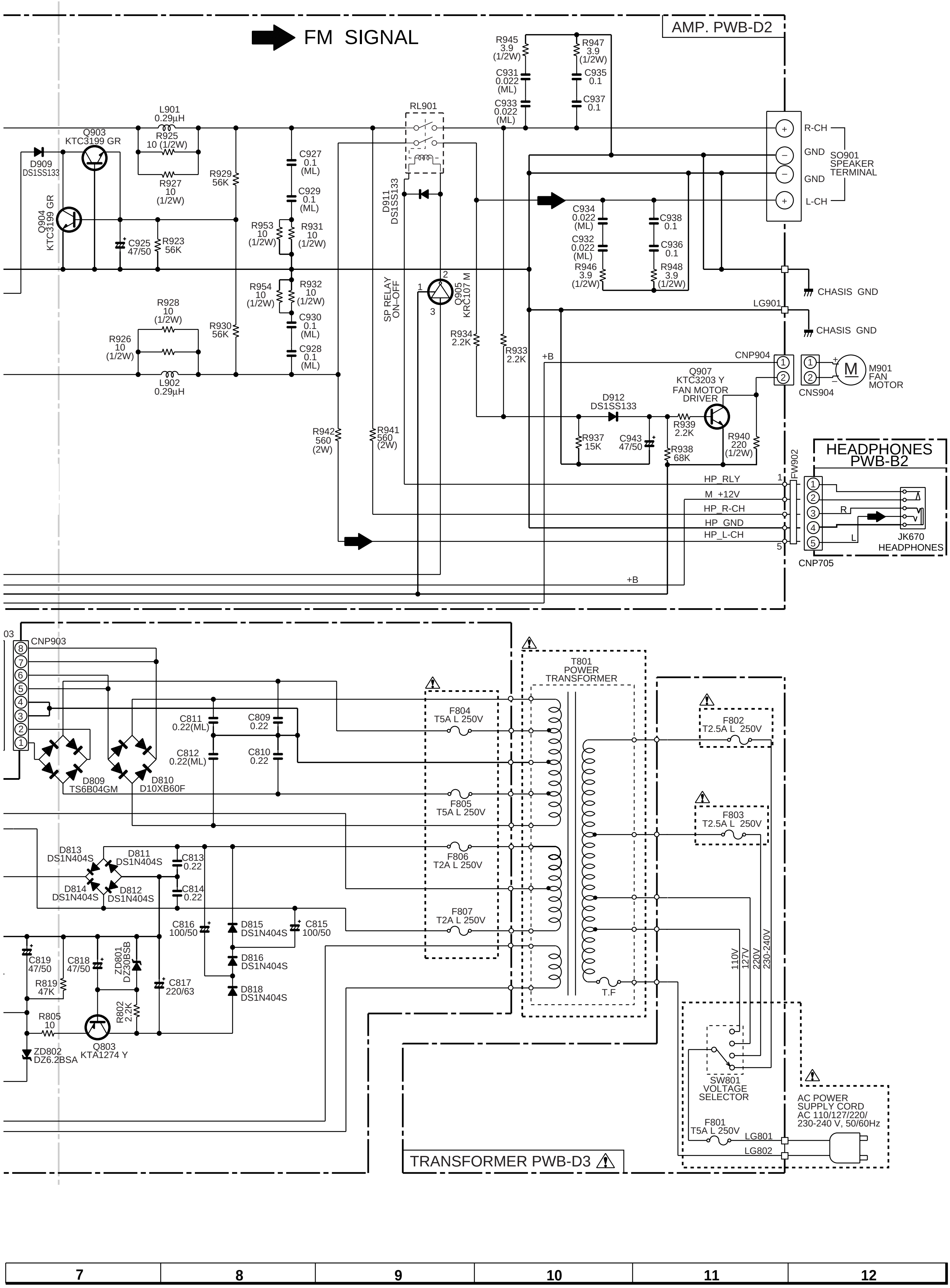
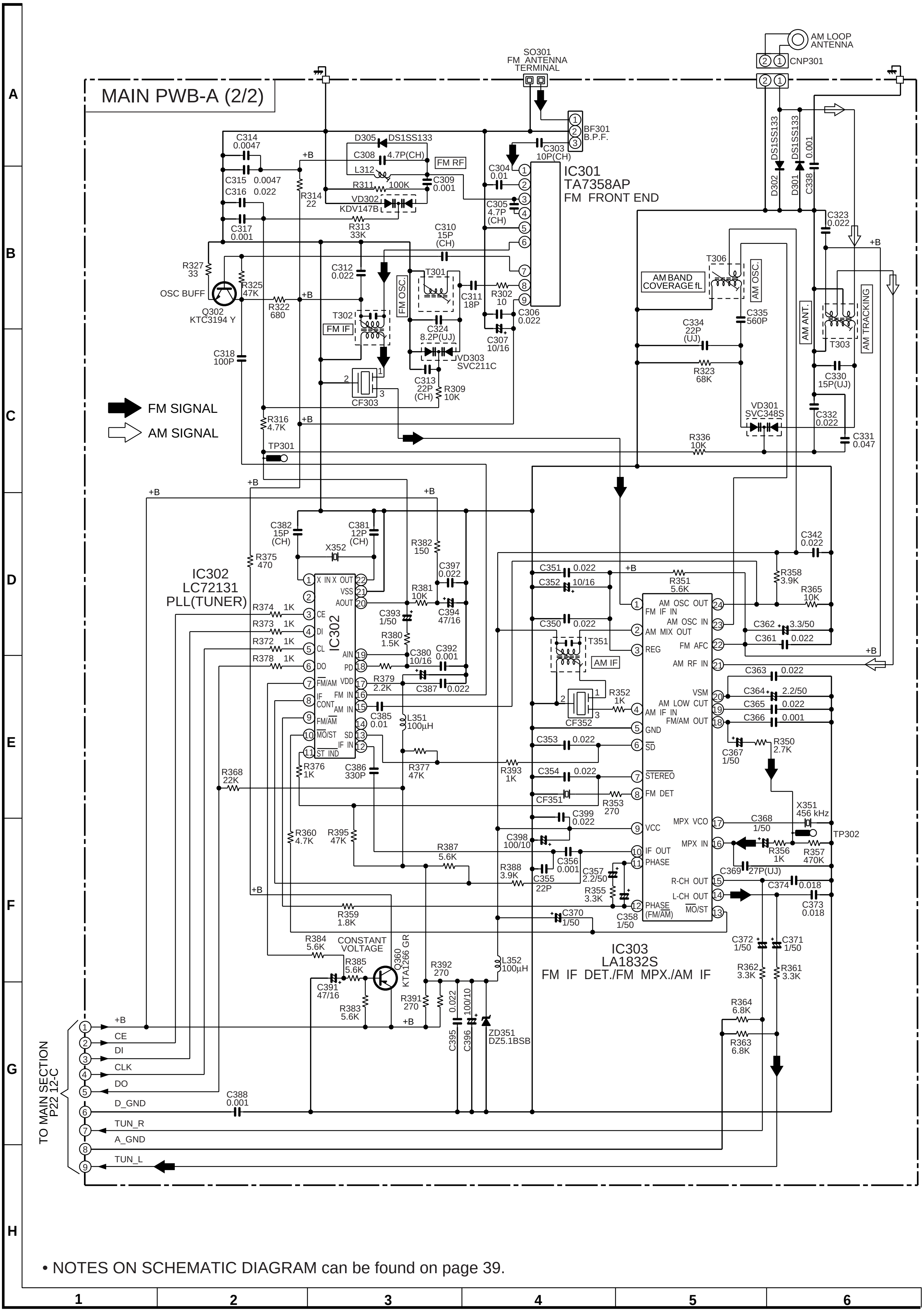
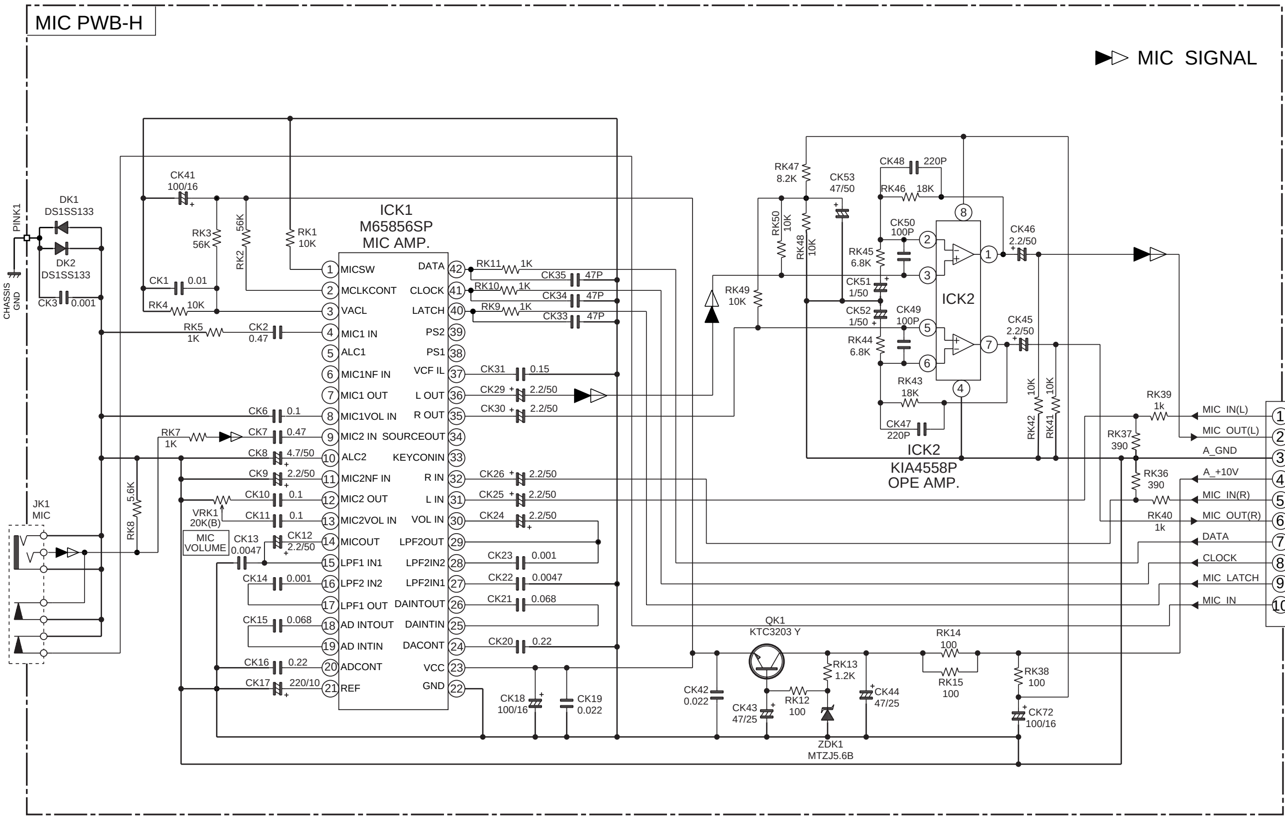


Figure 27 SCHEMATIC DIAGRAM (8/10)



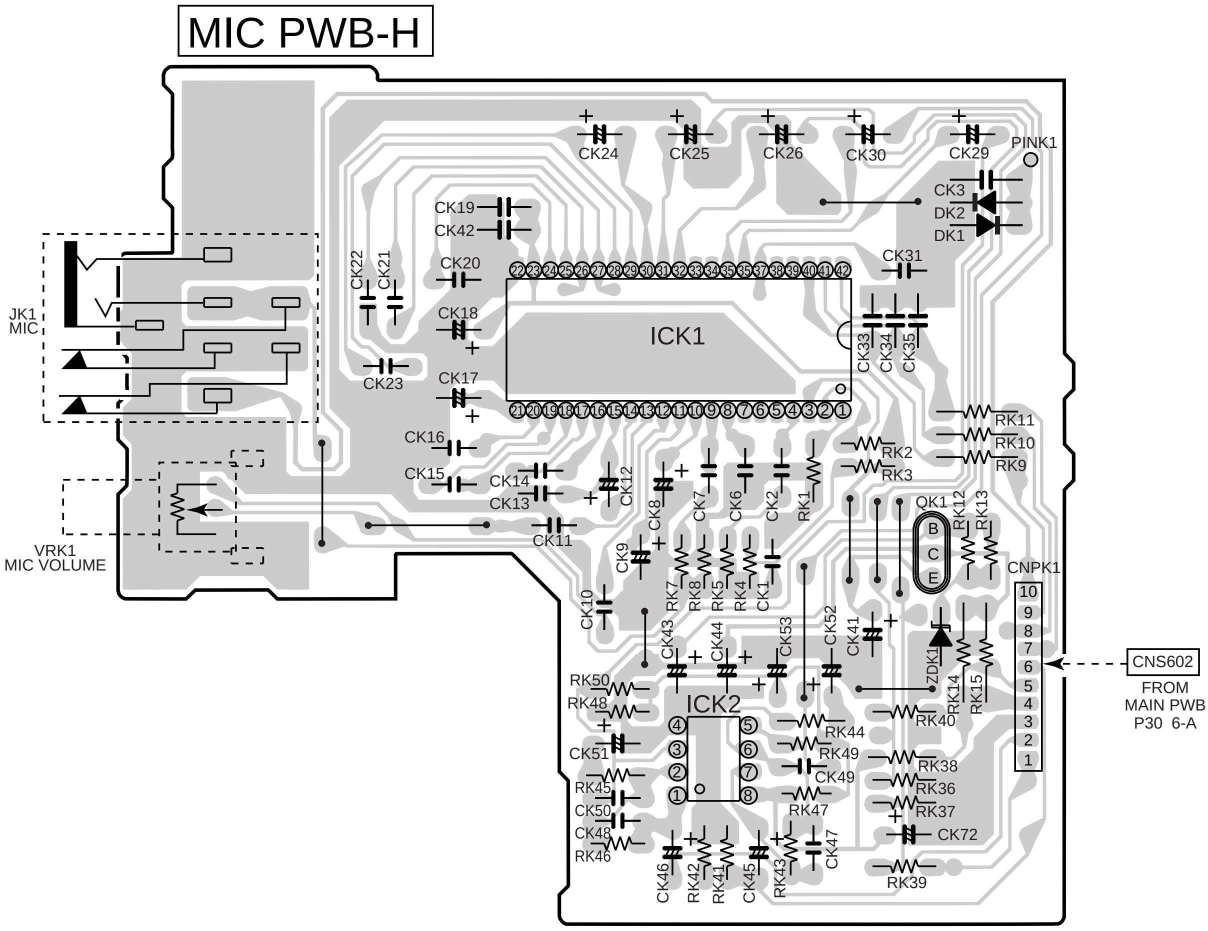
• NOTES ON SCHEMATIC DIAGRAM can be found on page 39.

Figure 28 SCHEMATIC DIAGRAM (9/10)



• NOTES ON SCHEMATIC DIAGRAM can be found on page 39.

Figure 29 SCHEMATIC DIAGRAM (10/10)



7	8	9	10	11	12

Figure 29 WIRING SIDE OF P.W.BOARD (1/9)

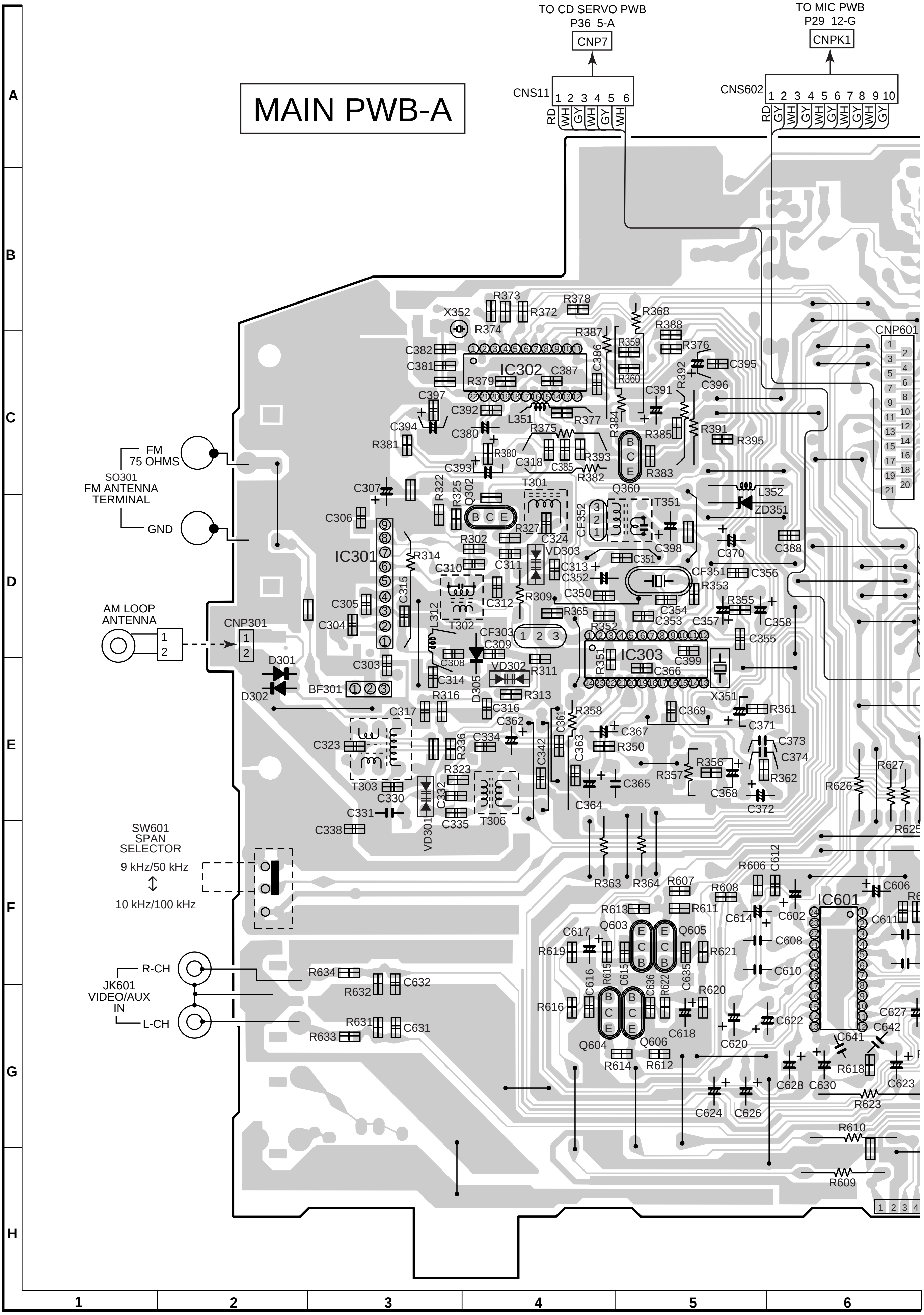
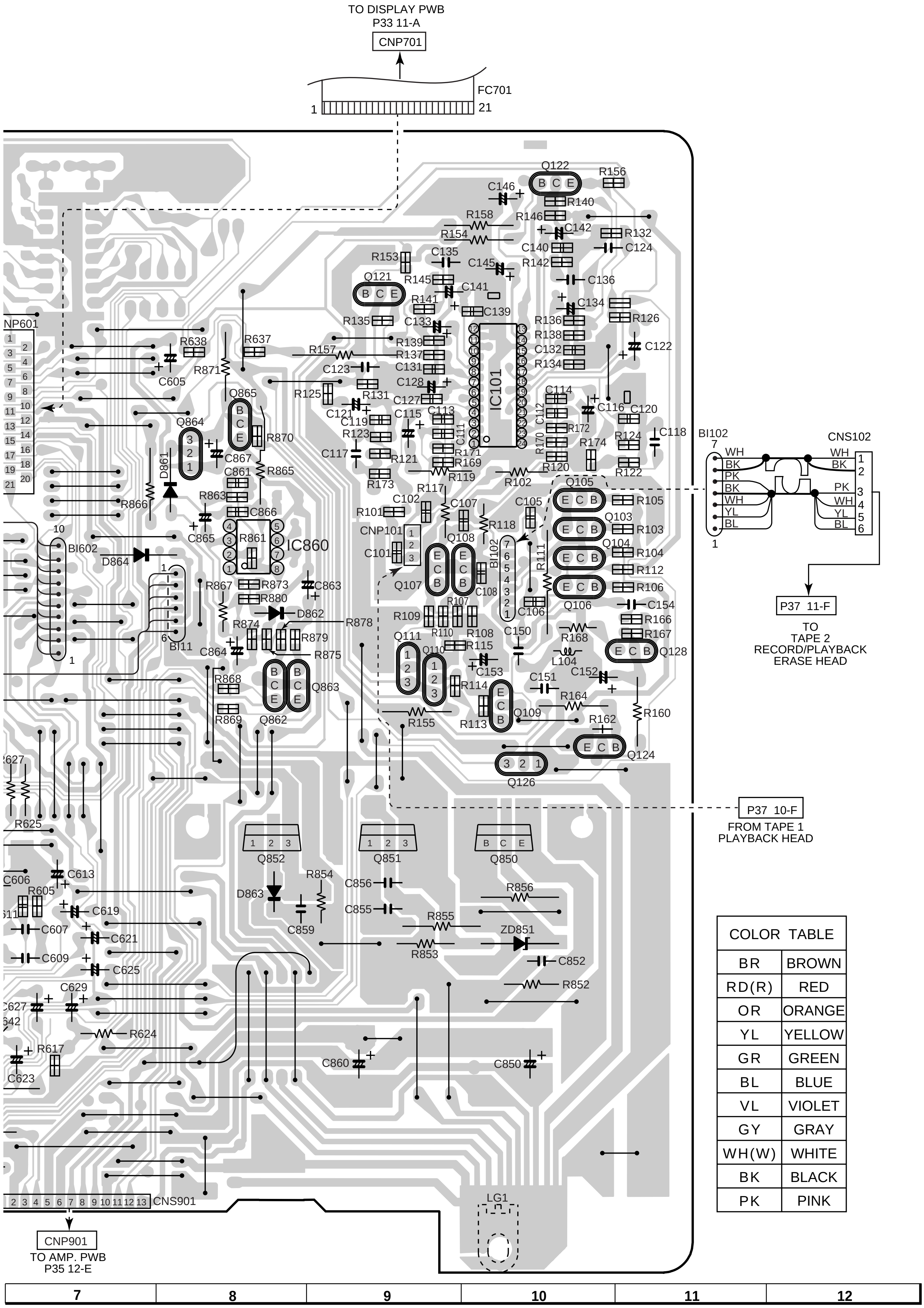


Figure 30 WIRING SIDE OF P.W.BOARD (2/9)



COLOR TABLE	
BR	BROWN
RD(R)	RED
OR	ORANGE
YL	YELLOW
GR	GREEN
BL	BLUE
VL	VIOLET
GY	GRAY
WH(W)	WHITE
BK	BLACK
PK	PINK

Figure 31 WIRING SIDE OF P.W.BOARD (3/9)

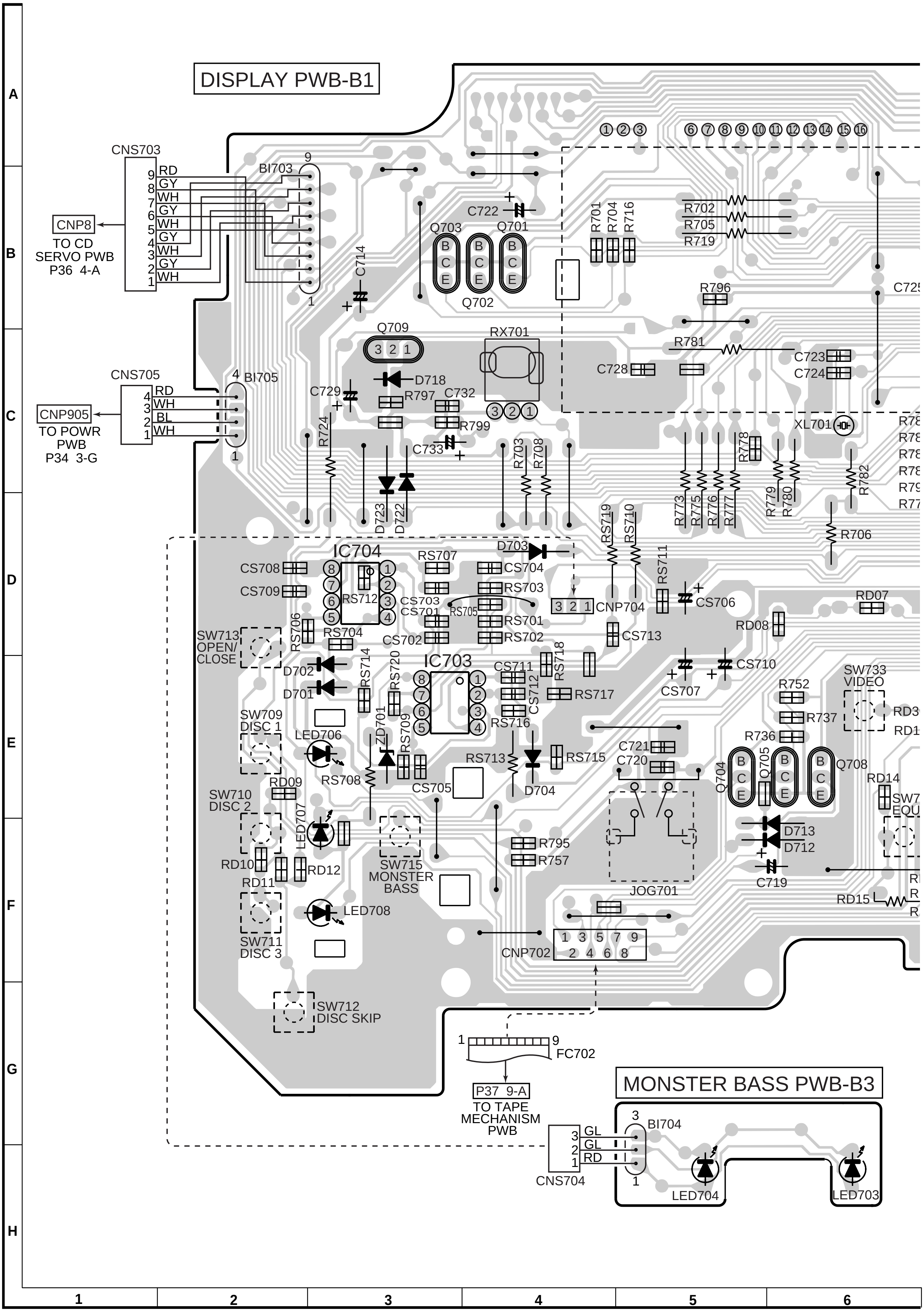
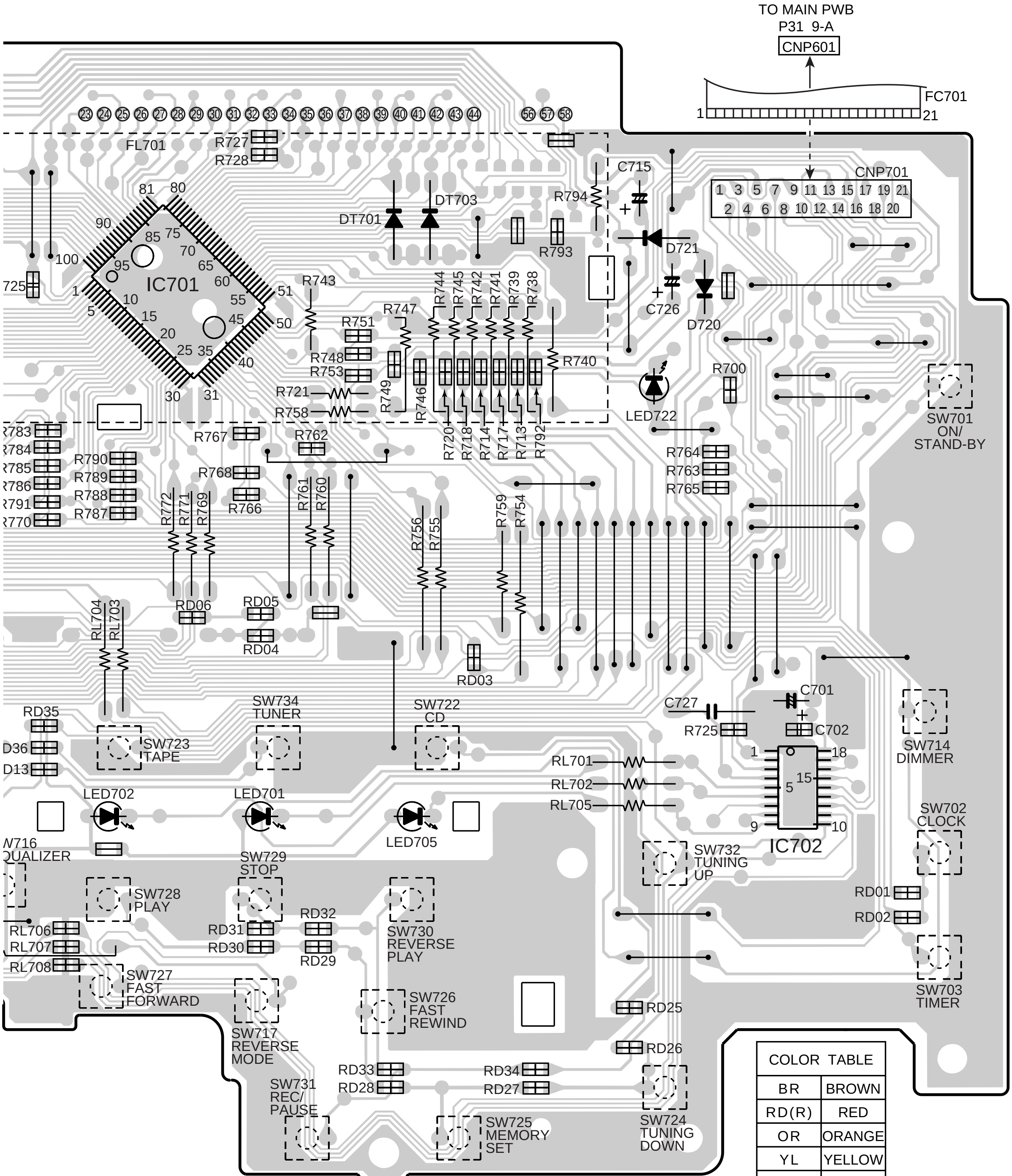


Figure 32 WIRING SIDE OF P.W.BOARD (4/9)



COLOR TABLE	
BR	BROWN
RD(R)	RED
OR	ORANGE
YL	YELLOW
GR	GREEN
BL	BLUE
VL	VIOLET
GY	GRAY
WH(W)	WHITE
BK	BLACK
PK	PINK

7	8	9	10	11	12

Figure 33 WIRING SIDE OF P.W.BOARD (5/9)

COLOR TABLE	
BR	BROWN
RD(R)	RED
OR	ORANGE
YL	YELLOW
GR	GREEN
BL	BLUE
VL	VIOLET
GY	GRAY
WH(W)	WHITE
BK	BLACK
PK	PINK

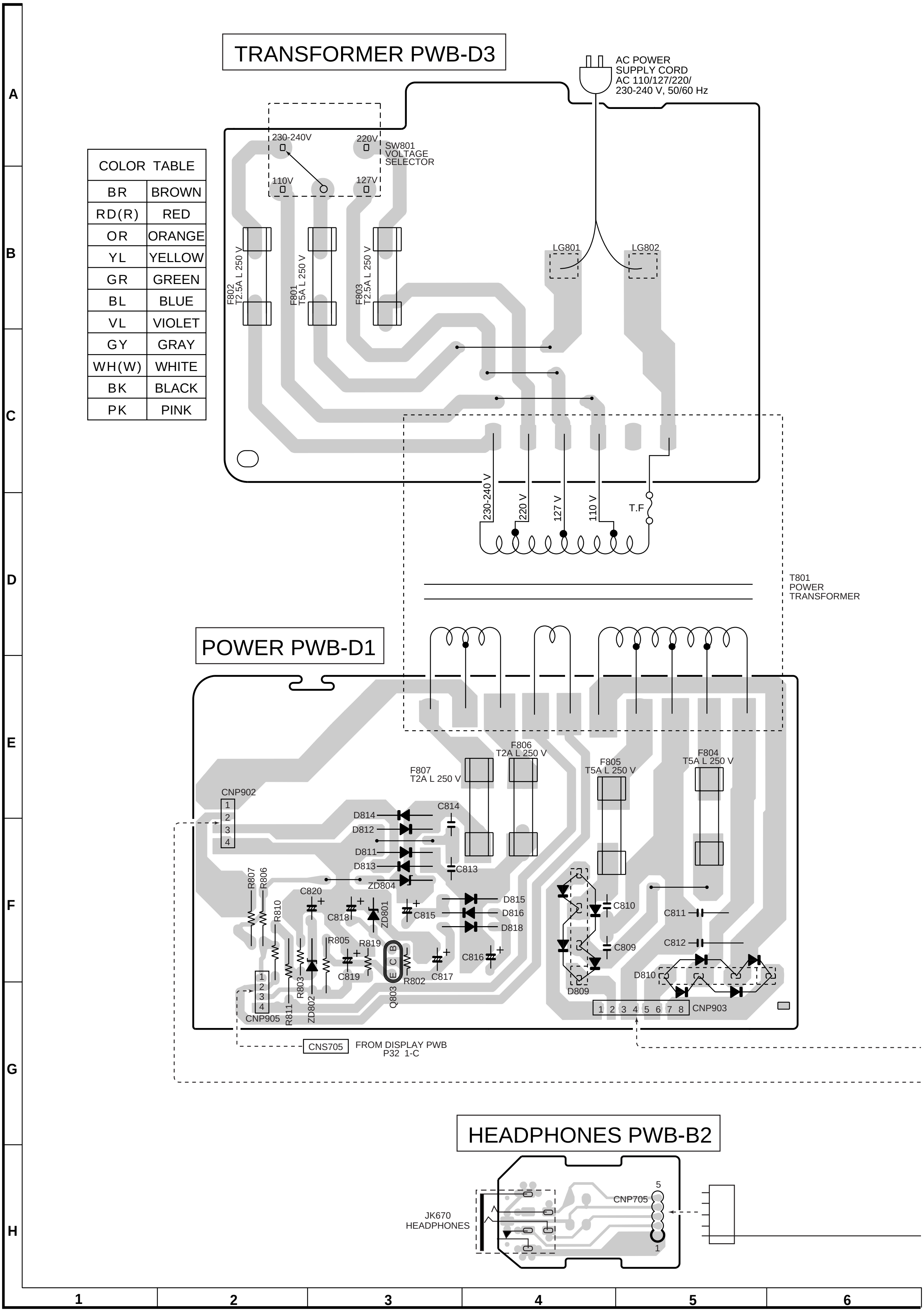
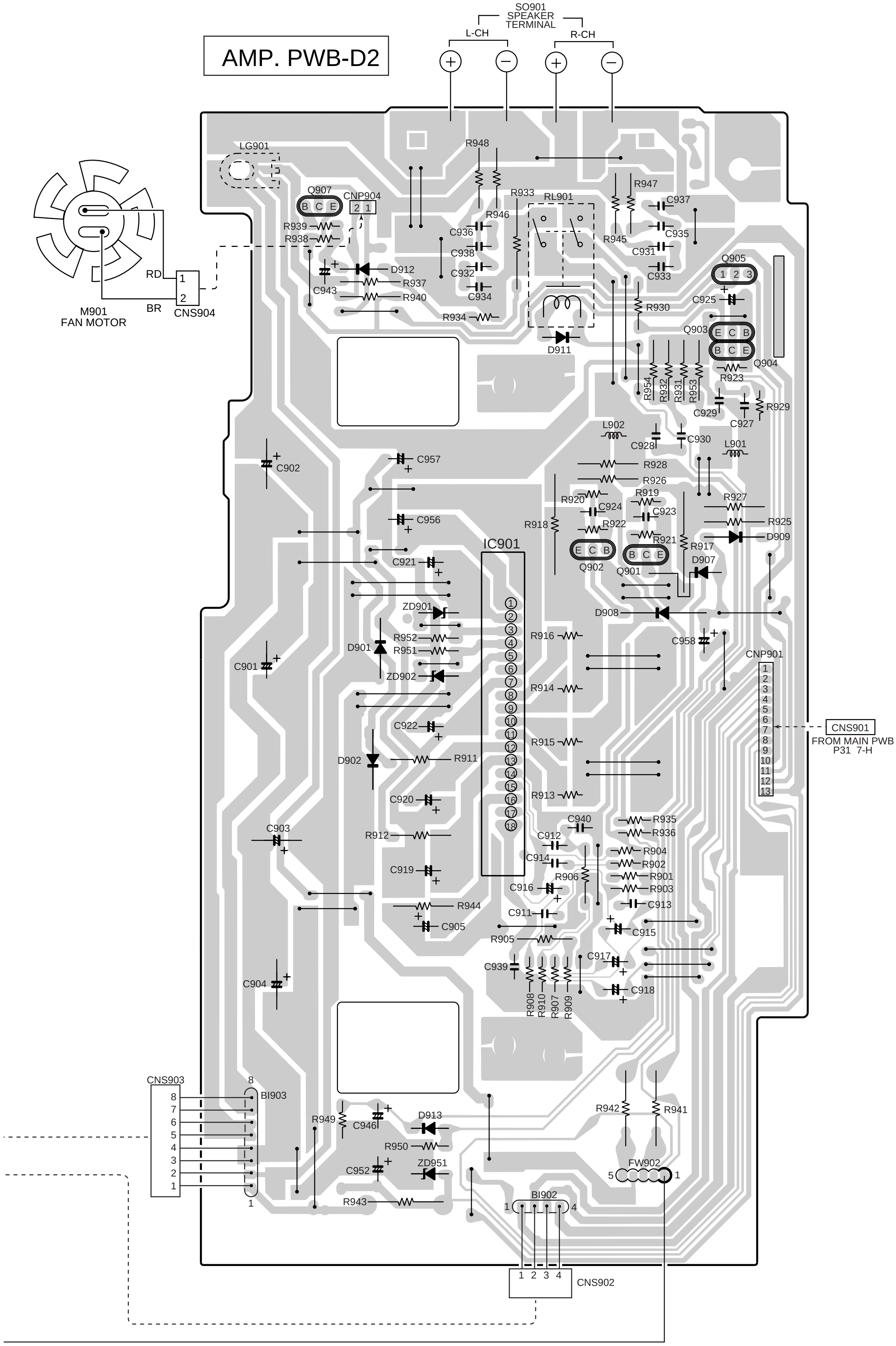
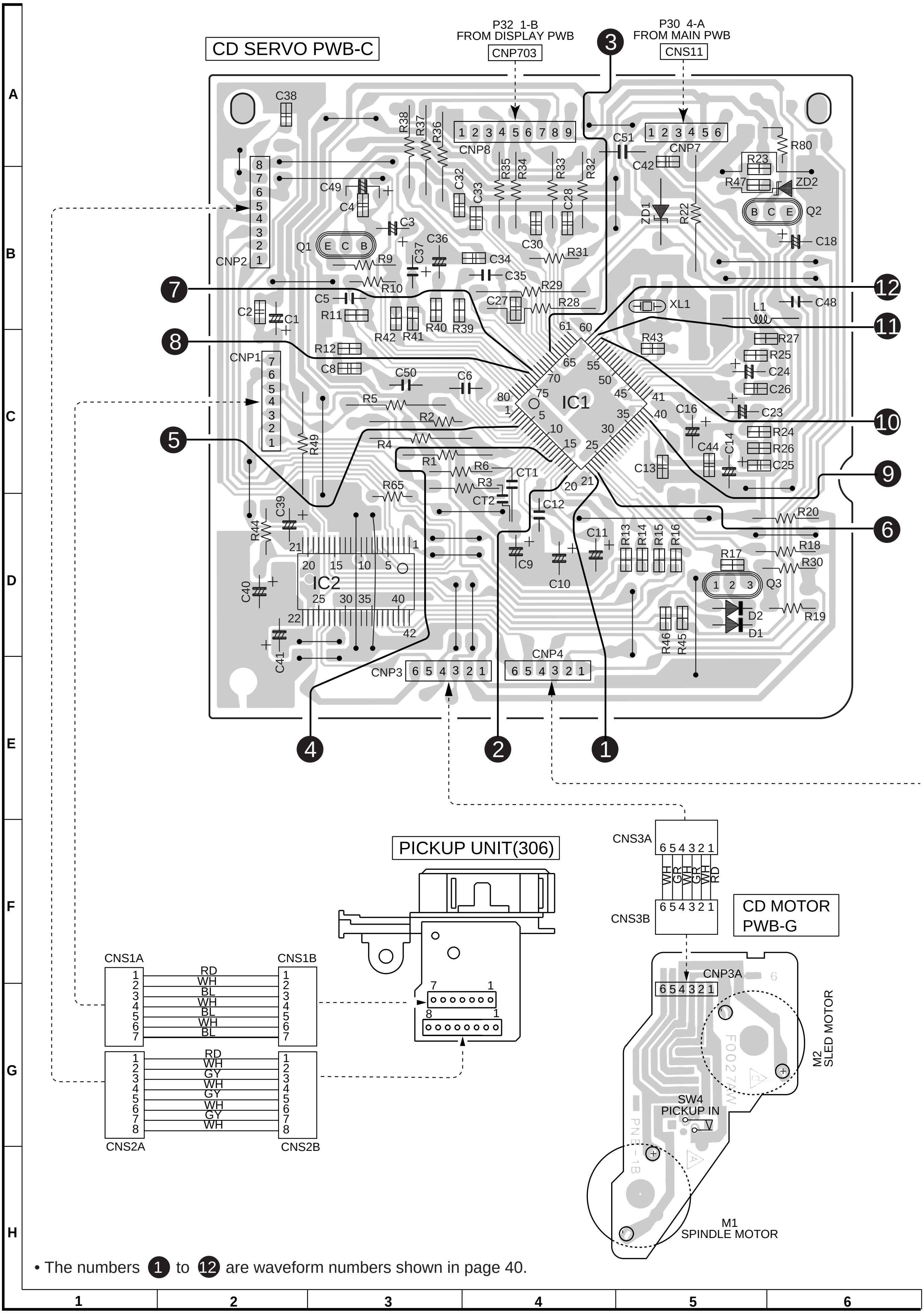


Figure 34 WIRING SIDE OF P.W.BOARD (6/9)



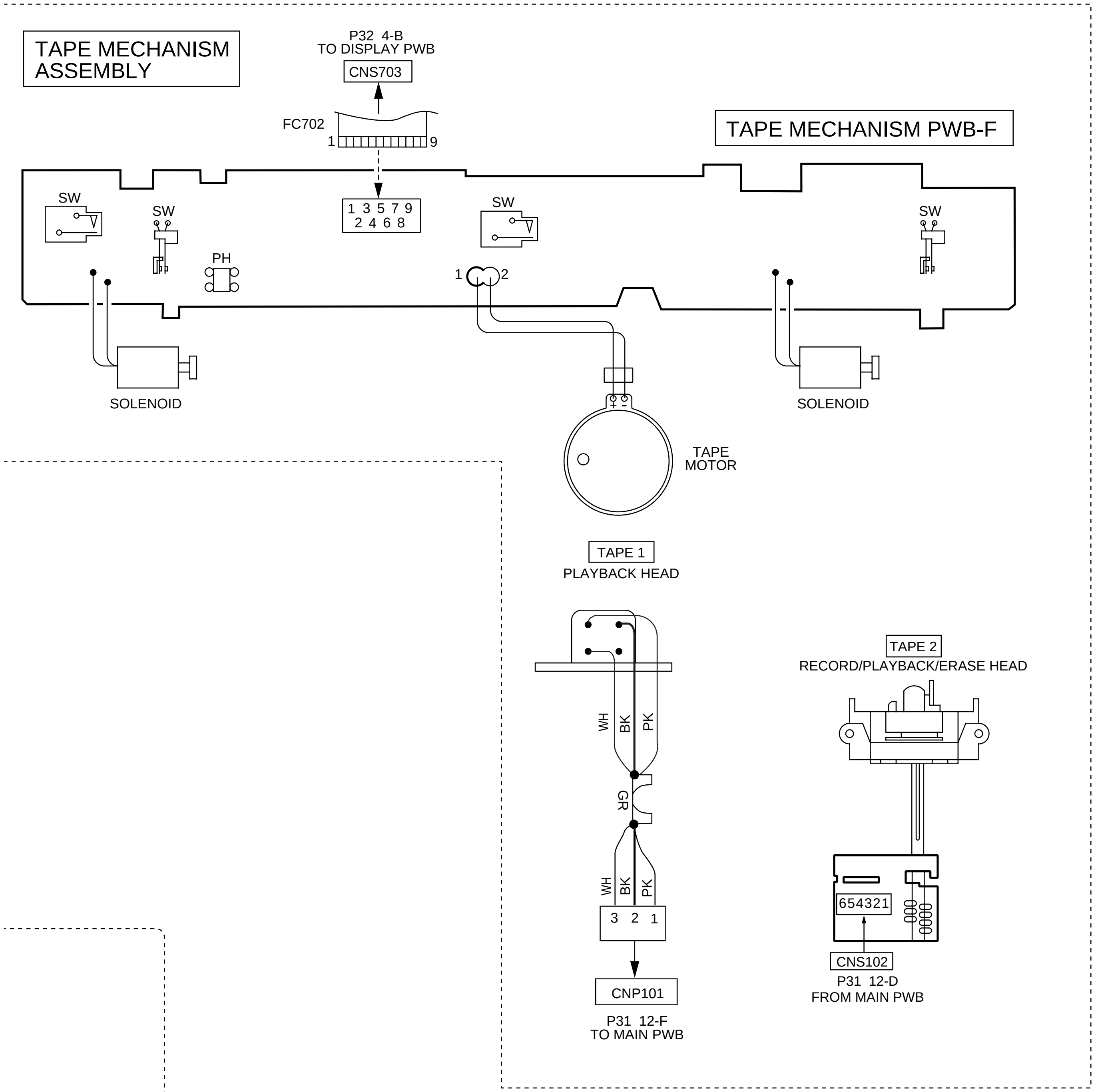
7	8	9	10	11	12

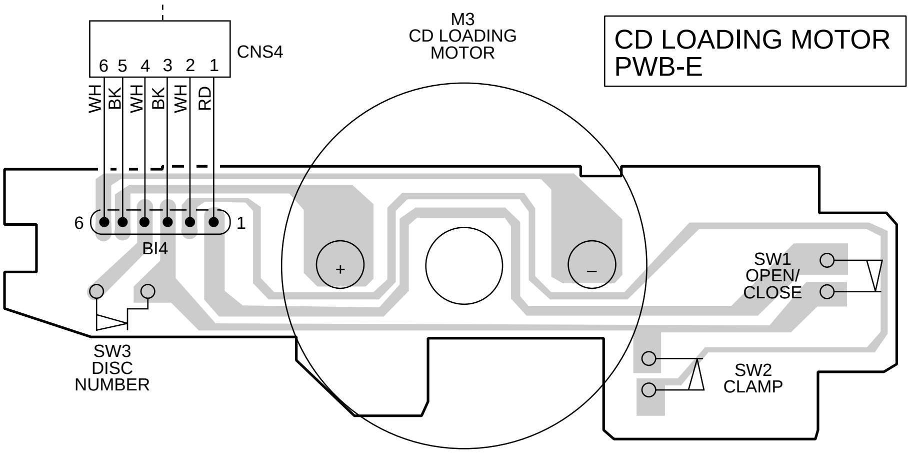
Figure 35 WIRING SIDE OF P.W.BOARD (7/9)



• The numbers 1 to 12 are waveform numbers shown in page 40.

Figure 36 WIRING SIDE OF P.W.BOARD (8/9)





COLOR TABLE	
BR	BROWN
RD(R)	RED
OR	ORANGE
YL	YELLOW
GR	GREEN
BL	BLUE
VL	VIOLET
GY	GRAY
WH(W)	WHITE
BK	BLACK
PK	PINK

7	8	9	10	11	12

Figure 37 WIRING SIDE OF P.W.BOARD (9/9)

VOLTAGE

IC1

PIN NO.	VOLTAGE	PIN NO.	VOLTAGE
1	1.6 V	41	3.7 V
2	1 V	42	3.7 V
3	1.6 V	43	0 V
4	1.8 V	44	0 V
5	3.3 V	45	3.7 V
6	0 V	46	3.2 V
7	1.6 V	47	3.2 V
8	1.6 V	48	3.2 V
9	1.6 V	49	0 V
10	1.6 V	50	0 V
11	1.6 V	51	0 V
12	1.6 V	52	3.2 V
13	1.5 V	53	0 V
14	1.5 V	54	0 V
15	1.5 V	55	0 V
16	1.5 V	56	0 V
17	0.8 V	57	0 V
18	3.2 V	58	3.2 V
19	0 V	59	0 V
20	1.6 V	60	0 V
21	1.6 V	61	0 V
22	1.6 V	62	4.7 V
23	1.6 V	63	0 V
24	0 V	64	4.9 V
25	0 V	65	4.9 V
26	3.2 V	66	4.9 V
27	0 V	67	0 V
28	0 V	68	4.9 V
29	0 V	69	0 V
30	0 V	70	0 V
31	0 V	71	0 V
32	0 V	72	0 V
33	0 V	73	0 V
34	0 V	74	0 V
35	1.6 V	75	0 V
36	0 V	76	3.2 V
37	0 V	77	3.2 V
38	3.2 V	78	3.2 V
39	3.2 V	79	0 V
40	0 V	80	3.2 V

IC101

PIN NO.	VOLTAGE
1	0 V
2	0 V
3	0.5 V
4	2 V
5	0 V
6	1.3 V
7	0 V
8	0.6 V
9	3.5 V
10	3.4 V
11	0 V
12	0 V
13	7 V
14	4.1 V
15	0 V
16	3.4 V
17	0.6 V
18	0 V
19	0.7 V
20	0 V
21	2 V
22	0.5 V
23	0 V
24	0 V

IC601

PIN NO.	VOLTAGE
1	0 V
2	0 V
3	0 V
4	5.3 V
5	5.3 V
6	5 V
7	5 V
8	5.3 V
9	5 V
10	5 V
11	5 V
12	5 V
13	5 V
14	5 V
15	5 V
16	5 V
17	5 V
18	5 V
19	5 V
20	5 V
21	5 V
22	5 V
23	10.2 V
24	0 V

IC701

PIN NO.	VOLTAGE	PIN NO.	VOLTAGE
1	4.23 V	51	0 V
2	4.14 V	52	0 V
3	0 V	53	4.6 V
4	0 V	54	5 V
5	4.15 V	55	5 V
6	4.2 V	56	5 V
7	4.2 V	57	0 V
8	0 V	58	0 V
9	0 V	59	-33.1 V
10	4.23 V	60	0 V
11	2.34 V	61	0 V
12	1.86 V	62	0 V
13	0 V	63	0 V
14	3.87 V	64	0 V
15	4.45 V	65	0 V
16	0 V	66	0 V
17	0 V	67	-37.4 V
18	0 V	68	-32.6 V
19	0 V	69	-32.7 V
20	0 V	70	-29.8 V
21	0 V	71	-29.9 V
22	0 V	72	-32.7 V
23	0 V	73	-19.2 V
24	0 V	74	-22 V
25	0 V	75	-32.8 V
26	4.63 V	76	-30.1 V
27	4.23 V	77	-32.8 V
28	0 V	78	-17.6 V
29	0 V	79	-32.8 V
30	0 V	80	-32.3 V
31	4.48 V	81	-24.9 V
32	4.25 V	82	-19.5 V
33	4.5 V	83	-22.2 V
34	4.3 V	84	-33 V
35	4.44 V	85	-33 V
36	2.13 V	86	-19.6 V
37	4.88 V	87	-19.6 V
38	4.9 V	88	-14.41 V
39	4.36 V	89	-22.8 V
40	0 V	90	-27.2 V
41	0 V	91	-27.2 V
42	12.66 V	92	-27.5 V
43	12.78 V	93	-27.7 V
44	12.3 V	94	-27.7 V
45	4.9 V	95	-27.7 V
46	4.42 V	96	-27.6 V
47	4.33 V	97	-27.7 V
48	4.32 V	98	-27.7 V
49	4.48 V	99	-27.7 V
50	4.78 V	100	-30.2 V

IC2

PIN NO.	VOLTAGE
1	1.7 V
2	1.7 V
3	1.8 V
4	2.1 V
5	2.1 V
6	2.1 V
7	2 V
8	0 V
9	0 V
10	0 V
11	0 V
12	0 V
13	0 V
14	0 V
15	2.1 V
16	2.1 V
17	1.6 V
18	4.9 V
19	3 V
20	1.6 V
21	0 V
22	0 V
23	4.9 V
24	4.9 V
25	1.6 V
26	2.1 V
27	2.1 V
28	0 V
29	0 V
30	0 V
31	0 V
32	0 V
33	0 V
34	0 V
35	0 V
36	4.2 V
37	0 V
38	2.1 V
39	2.1 V
40	4.9 V
41	3.7 V
42	3.7 V

Q850

PIN NO.	VOLTAGE
1	12.93 V
2	12.31 V
3	22.1 V

Q851

PIN NO.	VOLTAGE
1	21.4 V
2	0 V
3	10.1 V

Q852

PIN NO.	VOLTAGE
1	11.1 V
2	0 V
3	5 V

IC301

PIN NO.	VOLTAGE
1	0 V
2	0 V
3	0.3 V
4	0 V
5	0 V
6	0 V
7	0 V
8	0 V
9	0 V

IC903

PIN NO.	VOLTAGE
1	5 V
2	5 V
3	5 V
4	0 V
5	5 V
6	5 V
7	5 V
8	10 V

IC303

PIN NO.	VOLTAGE
1	2.1 V
2	5 V
3	2.1 V
4	2.1 V
5	0 V
6	5.1 V
7	5.1 V
8	2.9 V
9	5 V
10	4.3 V
11	3.9 V
12	3.9 V
13	3.5 V
14	1.3 V
15	1.3 V
16	2.1 V
17	2.4 V
18	2.3 V
19	0 V
20	0.4 V
21	2.7 V
22	2.7 V
23	5 V
24	3.5 V

IC901

PIN NO.	VOLTAGE
1	60.8 V
2	26.8 V
3	26.8 V
4	-26.7 V
5	-26.7 V
6	-60.8 V
7	0 V
8	0 V
9	0 V
10	0 V
11	0 V
12	-59 V
13	59.4 V
14	0 V
15	0 V
16	-58 V
17	0 V
18	0 V

CNP903

PIN NO.	VOLTAGE
1	-26.4 V
2	26.5 V
3	0 V
4	0 V
5	-60.2 V
6	0 V
7	60.3 V
8	60.3 V

ICK1

PIN NO.	VOLTAGE
1	0.81 V
2	1 V
3	0.75 V
4	2.5 V
5	4.6 V
6	2.5 V
7	2.5 V
8	2.5 V
9	2.5 V
10	2.5 V
11	2.5 V
12	2.5 V
13	2.5 V
14	2.5 V
15	2.5 V
16	2.5 V
17	2.5 V
18	2.5 V
19	2.5 V
20	0.5 V
21	2.5 V
22	0 V
23	5 V
24	0 V
25	2.5 V
26	2.5 V
27	2.5 V
28	2.5 V
29	2.5 V
30	2.5 V
31	2.5 V
32	2.5 V
33	2.5 V
34	2.5 V
35	2.5 V
36	2.5 V
37	2.5 V
38	0 V
39	0 V
40	0 V
41	0 V
42	0 V

CNP901

PIN NO.	VOLTAGE
1	0 V
2	0 V
3	0 V
4	0 V
5	21.7 V
6	0 V
7	10.4 V
8	12.25 V
9	-13.25 V
10	0 V
11	3.88 V
12	4.38 V
13	5.02 V

IC702

PIN NO.	VOLTAGE
1	0 V
2	0 V
3	0 V
4	0 V
5	8.56 V
6	8.54 V
7	0 V
8	0 V
9	8.59 V
10	8.57 V
11	8.56 V
12	8.56 V
13	8.71 V
14	8.72 V
15	0 V
16	0 V
17	0 V
18	5.1 V

CNP902

PIN NO.	VOLTAGE
1	11.1 V
2	0 V
3	21.9 V
4	0 V

CNP905

PIN NO.	VOLTAGE
1	1.95 V
2	-26.3 V
3	-32.8 V
4	-26.3 V

IC704

PIN NO.	VOLTAGE
1	0 V
2	0 V
3	0 V
4	-10.96 V
5	0 V
6	0 V
7	0 V
8	6.41 V

IC703

PIN NO.	VOLTAGE
1	0.2 V
2	0.2 V
3	0.2 V
4	-11 V
5	0 V
6	0 V
7	0 V
8	6.44 V

IC860

PIN NO.	VOLTAGE
1	-10.34 V
2	3.22 V
3	0.6 V
4	-12.2 V
5	0 V
6	0.4 V
7	-10.9 V
8	10.1 V

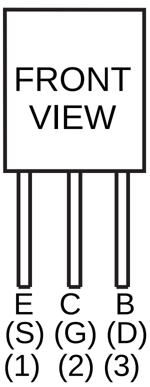
NOTES ON SCHEMATIC DIAGRAM

- Resistor:
  To differentiate the units of resistors, such symbol as K and M are used: the symbol K means 1000 ohm and the symbol M means 1000 kohm and the resistor without any symbol is ohm-type resistor. Besides, the one with “Fusible” is a fuse type.
- Capacitor:
  To indicate the unit of capacitor, a symbol P is used: this symbol P means pico-farad and the unit of the capacitor without such a symbol is microfarad. As to electrolytic capacitor, the expression “capacitance/withstand voltage” is used.
  (CH), (TH), (RH), (UJ): Temperature compensation
  (ML): Mylar type
  (P.P.): Polypropylene type
- Schematic diagram and Wiring Side of P.W.Board for this model are subject to change for improvement without prior notice.
- The indicated voltage in each section is the one measured by Digital Multimeter between such a section and the chassis with no signal given.
  1. In the tuner section,
     indicates AM
     indicates FM stereo
  2. In the main section, a tape is being played back.
  3. In the deck section, a tape is being played back.
     ( ) indicates the record state.
  4. In the power section, a tape is being played back.
  5. In the CD section, the CD is stopped.
- Parts marked with “⚠” ( ) are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

REF. NO	DESCRIPTION	POSITION
SW1	OPEN/CLOSE	ON—OFF
SW2	CLAMP	ON—OFF
SW3	DISC NUMBER	ON—OFF
SW4	PICKUP IN	ON—OFF
SW601	SPAN SELECTOR	9 kHz/50 kHz
SW701	ON/STAND-BY	ON—OFF
SW702	CLOCK	ON—OFF
SW703	TIMER	ON—OFF
SW709	DISC 1	ON—OFF
SW710	DISC 2	ON—OFF
SW711	DISC 3	ON—OFF
SW712	DISC SKIP	ON—OFF
SW713	OPEN/CLOSE	ON—OFF
SW714	DIMMER	ON—OFF
SW715	MONSTER BASS	ON—OFF
SW716	EQUALIZER	ON—OFF

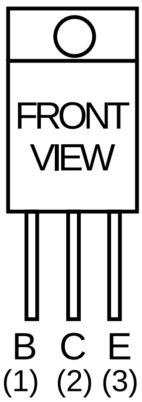
REF. NO	DESCRIPTION	POSITION
SW717	REVERSE MODE	ON—OFF
SW722	CD	ON—OFF
SW723	TAPE	ON—OFF
SW724	TUNING/DOWN	ON—OFF
SW725	MEMORY SET	ON—OFF
SW726	FAST REWIND	ON—OFF
SW727	FAST FORWARD	ON—OFF
SW728	PLAY	ON—OFF
SW729	STOP	ON—OFF
SW730	REVERSE PLAY	ON—OFF
SW731	REC/PAUSE	ON—OFF
SW732	TUNING UP	ON—OFF
SW733	VIDEO	ON—OFF
SW734	TUNER	ON—OFF
SW801	VOLTAGE SELECTOR	230-240 V

TYPES OF TRANSISTOR AND LED

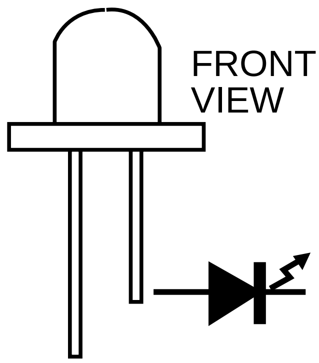


KTA1266 GR
KTA1273 Y
KTA1274 Y
KTC3194 Y
KTC3199 GR

KTC3203 Y
KRC102 M
KRC104 M
KRC107 M
2SA1015 GR
2SC1845 F



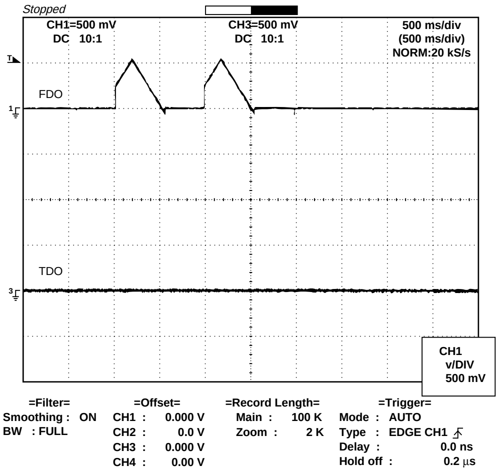
KTC2026
KIA7810 AP
KIA7805 AP



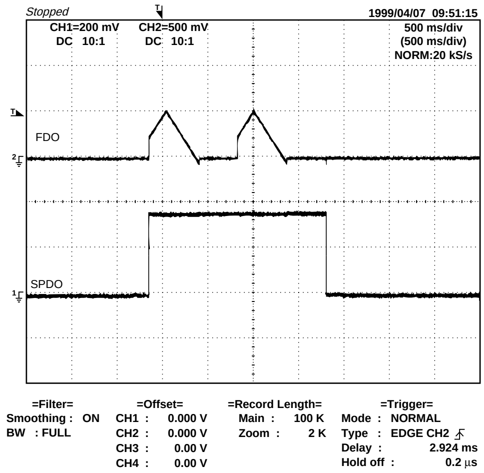
4204SRT7
4204UYT7
4204UGT7
31URT21

WAVEFORMS OF CD CIRCUIT

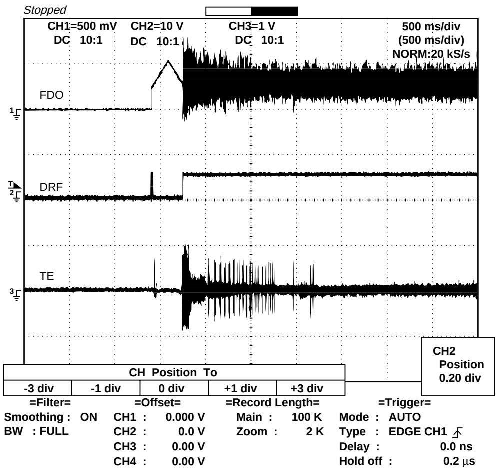
❶ IC1 ㉑
❷ IC1 ⑳



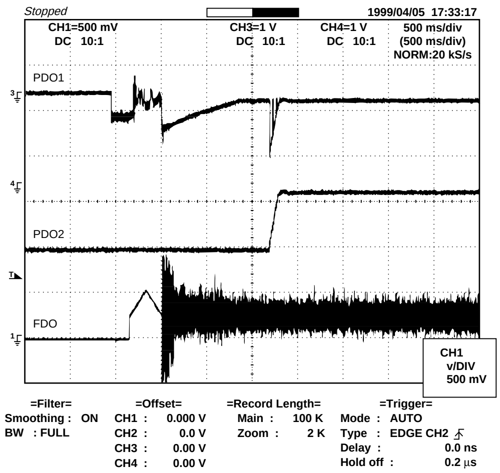
❶ IC1 ㉑
❻ IC1 ㉒



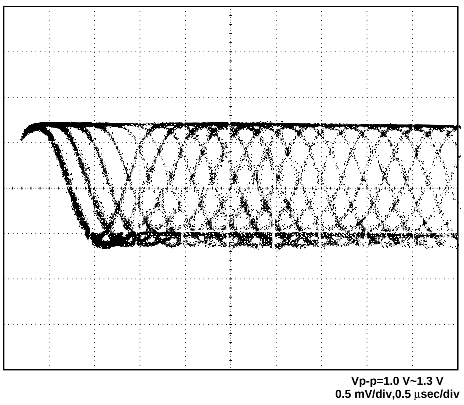
❶ IC1 ㉑
❸ IC1 ㊲
❹ IC1 ⑮



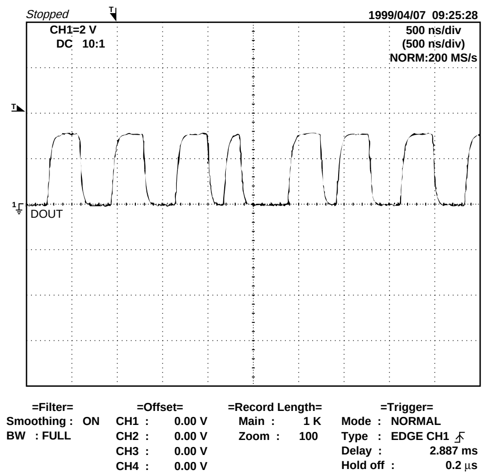
❼ IC1 ㊸
❽ IC1 ㊹
❶ IC1 ㉑



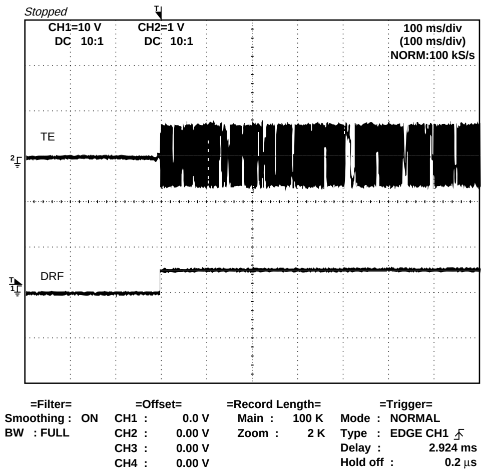
❺ IC1 ④



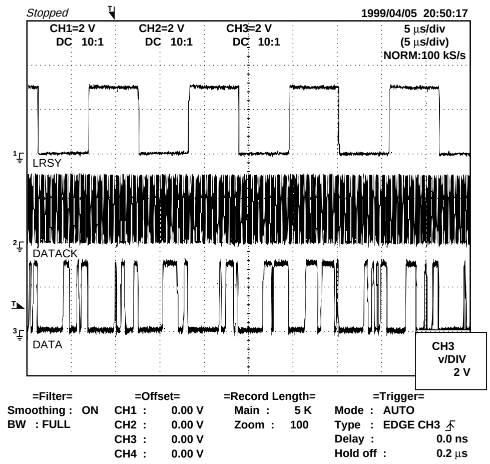
❾ IC1 ㊴



❹ IC1 ⑮
❸ IC1 ㊲



❿ IC1 58
⓫ IC1 59
⓬ IC1 60



TROUBLESHOOTING

When the CD does not function

When the CD section does not operate when the objective lens of the optical pickup is dirty, this section may not operate. Clean the objective lens, and check the playback operation. When this section does not operate even after the above step is taken, check the following items.
Remove the cabinet and follow the trouble shooting instructions.
"Track skipping and/or no TOC (Table Of Contents) may be caused by build up of dust other foreign matter on the laser pickup lens. Before attempting any adjustment make certain that the lens is clean. If not, clean it as mentioned below."

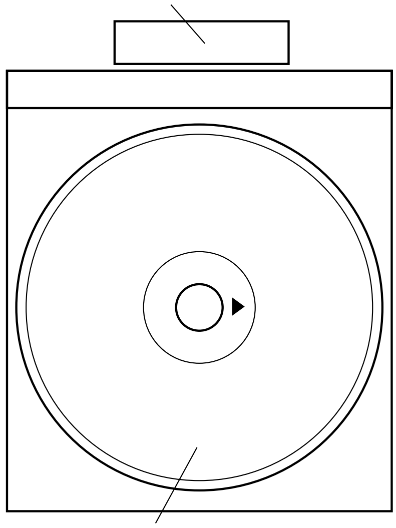
Turn off the power, and wipe the lens softly using a cleaning paper moistened with commercially available cleaning solution so as not to damage it. Be careful not to touch the lens with bare hands.

Dust gradually accumulates on the objective lens during use, and it may degrade performance. To avoid this problem, use a cleaning disc designed for CD optical pickup lenses..

		Parts code
1.	CD optical pickup Lens cleaner disc	UDSKA0004AFZZ

HOW TO USE

1. Using the brush in the cleaner cap, apply 1 or 2 drops of the cleaning fluid to the brush on the CD cleaner disc which has the mark next to it.
2. Place the CD cleaner disc onto the CD disc tray with the brush side down,then press the play button.
3. You will hear music for about 20 seconds and the CD player will automatically stop. If it continuous to turn, press the stop button.



CAUTION

- The CD lens cleaner should be effective for 30-50 operations, however if the brushes become worn out earlier then please the cleaner disc.
- If the CD cleaner brushes become very wet then wipe off any excess fluid with a soft cloth.
- Do not drink the cleaner fluid or allow it to come in contact with the eyes. In the event of this happening then drink and / or rinse with clean water and seek medical advice.
- The CD cleaner disc must not be used on car CD players or on computer CD-ROM drives.
- All rights reserved. Unauthorized duplicating, broadcasting and renting this product is prohibited by law.

When a CD cannot be played

1. "E-CD01" is displayed.

(1) Check the power to IC1 (LC78645E), the presence of the clock signal (33.8688 MHz) and the status of the RESET terminal (pin 66 on IC1).
(2) Does the pickup move to the PICKUP-IN Switch (SW4) position?

If (1) and (2) are OK, check the system microcomputer (especially the communication line with the DSP).

2. Pressing the CD operation key is accepted, but playback does not occur.

(1) Focus-HF system check
(2) Tracking system check
(3) Spin system check
(4) PLL system check
(5) Others

(1) Focus-HF system check.

Although a CD is inserted and the cover is closed, "NO DISC" is displayed.

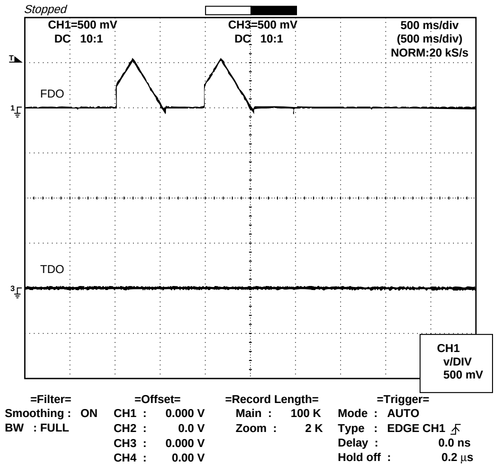


Figure 42-1

Press the OPEN/CLOSE switch (SW1) without inserting a disc, and try starting the playback operation.

1. Does the pickup move to the PICKUP-IN Switch (SW4) position ?
   - No → Sled motor (M2).
   - Yes ↓
2. Does the focus (lens) move up and down ? (Waveform drawing Figure 42-1)
   - No → Check the focus peripheral circuit.
   - Yes ↓
3. Is the laser lit ?
   - No → Check the laser diode driver Q1 peripheral circuit.
   - Yes ↓
4. Is the turntable rotating ?
   - No → Spindle motor (M1).

When a disc is loaded, start playback operation.

1. Is focus servo activated ? (Waveform drawing Figure 42-2)
   - No → Pins 7~12, 79 and 80 on IC1
     Check the laser diode driver Q1 peripheral circuit.
   - Yes ↓
2. Does DRF change from "L" to "H" ?
   - No → Is the disc rotating ? → No → Check the spin system.
     If the disc is spinning and a HF waveform is generated, DRF will go H.
   - Yes ↓
3. Is the HF waveform normal ? (Waveform drawing Figure 42-3)
   - No → If the level is not normal.

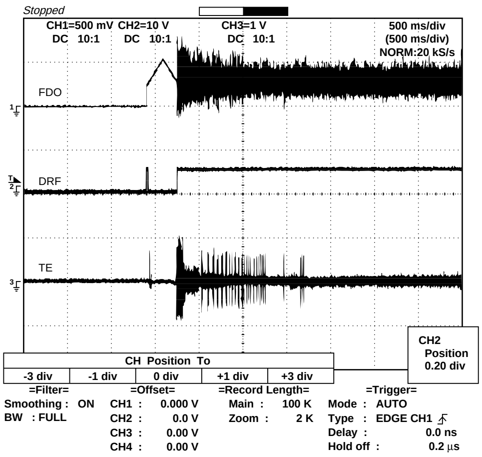


Figure 42-2

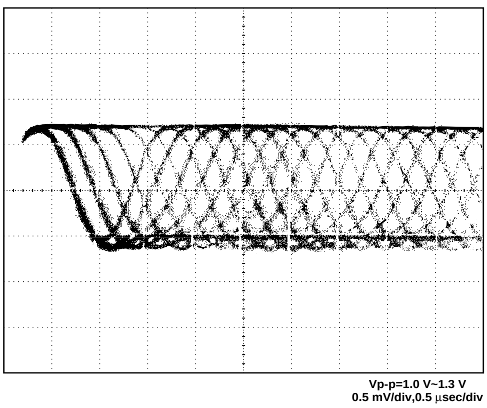


Figure 42-3

(2) Tracking system check.

Check the TE waveform at pin 15 on IC1.

- If the waveform shown in Figure 43-1 appears and soon after NO DISC appears ?
  - Yes → The tracking servo is not activated. Check the peripheral circuits at pins 14, 15 and 20 on IC1, and CNS1A/B.
  - No ↓
- "Initialization" is possible, but play is not possible ?
  - Yes → A normal jump operation cannot be completed or the beginning of the track cannot be found. Check the around pin 20 on IC1.
  - No ↓
- "Initialization" is not possible. → Data cannot be read. Check the VCO-PLL system.

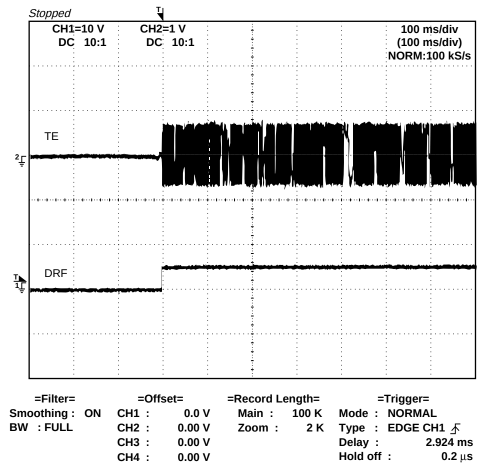


Figure 43-1

(3) Spin system check.

Press the OPEN/CLOSE switch without inserting a disc, and then try starting the play operation.

↓

1. The turntable rotates a little ? (Waveform drawing Figure 43-2)
   - Yes → The spin driver circuit is OK.
   - No ↓
2. The turntable doesn't rotate. → Check around pin 22 on IC1, pins 15 and 16 on IC3, and CNS3A/B.

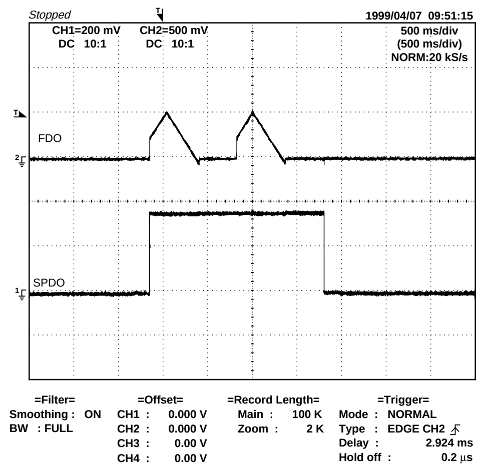


Figure 43-2

(4) PLL system check.

When a disc is loaded, start play operation.

↓

The HF waveform is normal, but the TOC data cannot be read.

↓

Check the PDO waveform. (Figure 44-1)

↓

Check around pins 73~78 on IC1.

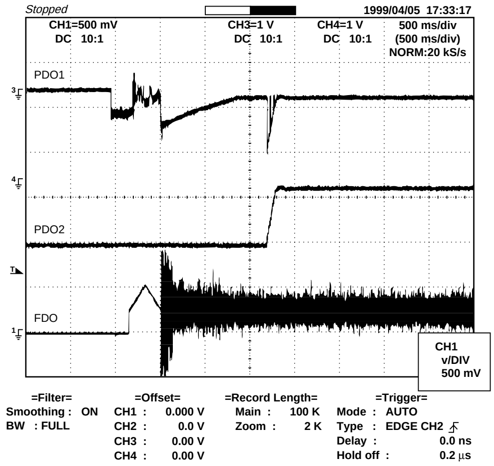


Figure 44-1

(5) Others.

The HF waveform is normal and the time is displayed normally, but no sound is produced. Or the sound has dropouts.

Is pin 52 (C2F) on IC1 "L" ?

No → There are too many error flags on a damaged disc which makes error correction impossible.

↓

Check again using a known good disc.

Yes ↓

1. When playing at normal speed.
   Check the peripheral circuit at pin 39 (DOUT) on IC1 and the waveform (Figure 44-2).

↓

If OK, Check the unit.

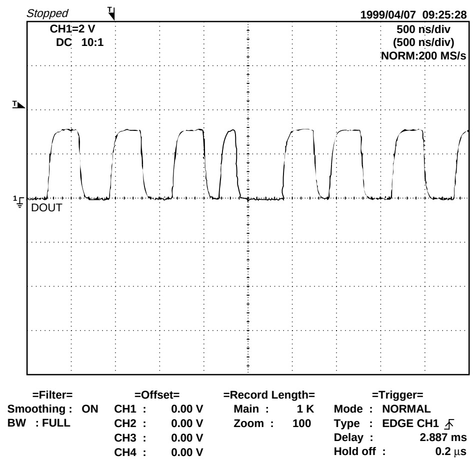


Figure 44-2

FUNCTION TABLE OF IC

IC1 VHiLC78645E-1: CD Servo (LC78645E) (1/2)

Pin No.	Terminal Name	Input/Output	Setting in Reset	Function	
1	SLCO	Output	—	For slice level control.	Control output.
2	SLCIST	Input	—		Resistor connection terminal for SLCO output current setting.
3	EFMIN	Input	—		RF signal input terminal.
4	RF	Output	—	RF signal monitor terminal.	
5	RFVDD	Input	—	RF power terminal.	
6	RFVSS	—	—	RF earth terminal. To be connected to 0 V.	
7	FIN1	Input	—	A+C signal input terminal.	
8	FIN2	Input	—	B+D signal input terminal.	
9	TIN1	Input	—	E signal input terminal.	
10	TIN2	Input	—	F signal input terminal.	
11	VREF	Output	RFVDD/2	VREF voltage output terminal.	
12	REFI	Input	—	Reference supply setting terminal.	
13*	FE	Output	ZHI	FE signal monitor terminal.	
14	TEC	Output	—	LPF capacitor connection terminal for TE signal.	
15*	TE	Output	ZHI	TE signal monitor terminal.	
16*	RFMON	Output	ZHI	RF internal signal monitor terminal.	
17	JITTC	—	—	Capacitor connection terminal for jitter detection.	
18	ADAVDD	Input	—	Power terminal for servo A/D, D/A.	
19	ADAVSS	—	—	Earth terminal for serve A/D, D/A. To be connected to 0 V.	
20	TDO	Output	ADAVDD/2	Output terminal for tracking control. D/A output.	
21	FDO	Output	ADAVDD/2	Output terminal for focus control. D/A output.	
22	SPDO	Output	ADAVDD/2	Output terminal for spindle control. D/A output.	
23	SLDO	Output	ADAVDD/2	Output terminal for sled control. D/A output.	
24*	GPDAC	Output	ADAVDD/2	Servo D/A general-purpose output terminal.	
25	CONT4	Input/Output	Input Mode	General-purpose I/O terminal 4.	Controlled by commands from the microcomputer. When not used, set them as input terminals and connect to 0 V, or set them as output terminals and leave open.
26	CONT5	Input/Output	Input Mode	General-purpose I/O terminal 5.	
27*	SBCK/CONT6	Input/Output	Input Mode	General-purpose I/O terminal 6 or Subcode reading clock input terminal.	
28	SBCK/FG	Input	—	Subcode reading clock input terminal/FG signal input terminal/external emphasis setting terminal. Terminal functions are set by commands. When not used, connect to 0 V.	
29*	DEFECT	Output	L	Defect terminal.	
30*	V/*P	Output	H	Auto switching monitor output terminal for rough servo phase control. “H”: rough servo, “L”: phase servo.	
31*	FSEQ	Output	L	Sync signal detection output terminal. The status changes to “H” when the sync signal detected in EFM and the sync signal of internal generation are identified.	
32*	MONI1	Output	L	Internal signal monitor terminal 1.	
33*	MONI2	Output	L	Internal signal monitor terminal 2.	
34*	MONI3	Output	L	Internal signal monitor terminal 3.	
35*	MONI4	Output	L	Internal signal monitor terminal 4.	
36*	MONI5	Output	L	Internal signal monitor terminal 5.	
37	VSS	—	—	Digital system earth terminal. To be connected to 0 V.	
38	VDD	Input	—	Digital system power terminal.	
39*	DOUT	Output	L	Digital OUT output terminal. (EIAJ format)	
40	TEST	Input	L	Input terminal for test. To be connected to 0 V.	
41	LVDD	Input	—	Left channel D/A converter	Power supply for Left channel.
42	LCHO	Output	LVDD/2		Left channel output.
43	LVSS	—	—		GND for Left channel. Must be connected to 0 V.

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

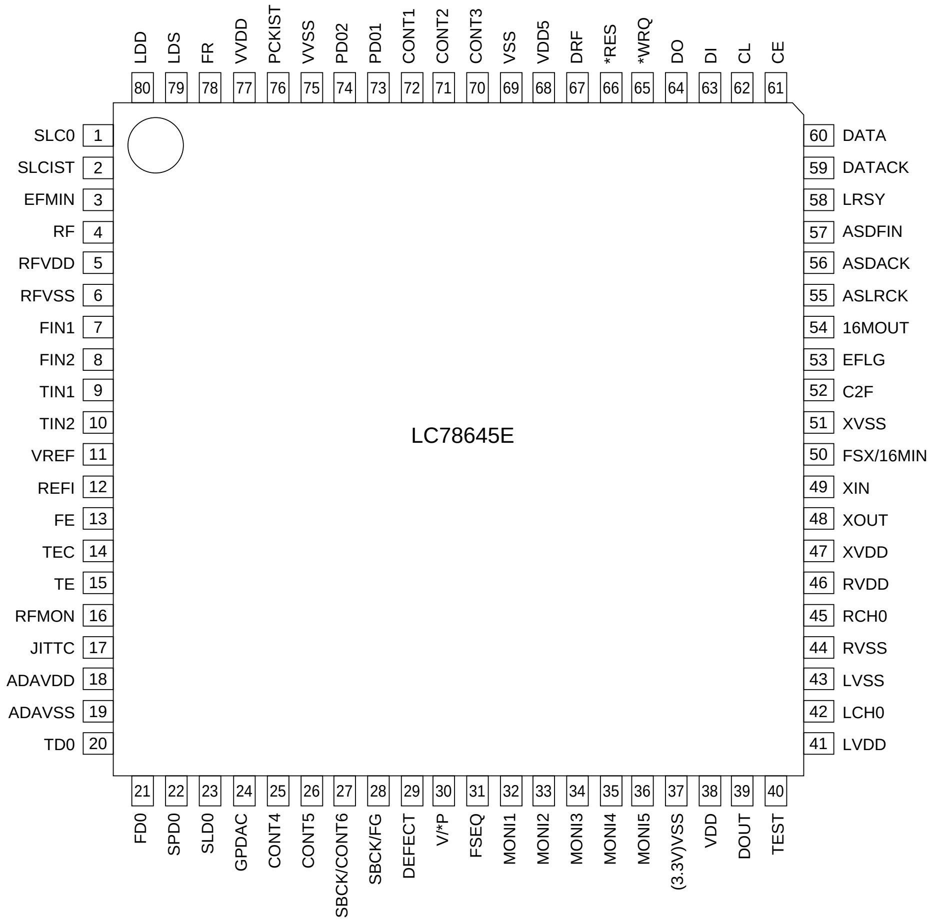
IC1 VHiLC78645E-1: CD Servo (LC78645E) (2/2)

Pin No.	Terminal Name	Input/Output	Setting in Reset	Function	
44	RVSS	—	—	Right channel D/A converter	GND for Right channel. Must be connected to 0 V.
45	RCHO	Output	LVDD /2		Right channel output.
46	RVDD	Input	—		Power supply for Right channel.
47	XVDD	Input	—	Crystal Oscillator	Power supply for crystal oscillator.
48	XOUT	Output	—		Connected for the 33.8688 MHz crystal oscillator cement.
49	XIN	Input	—		
50	FSX/16MIN	Input/Output	Input	7.35 kHz Synchronization signal monitor port. or Clock input port for Digital filter & D/A	
51	XVSS	—	—	Crystal Oscillator	GND for crystal oscillator. Must be connected to 0 V.
52*	C2F	Output	H	C2 FLAG monitor port.	
53*	EFLG	Output	L	C1, C2 error corrected monitor port.	
54*	16MOUT	Output	Clock	16.9344 MHz output port.	
55	ASLRCK	Input	—	Anti-shock	Word clock input port. (If this port does not use, must be connect to 0 V.)
56	ASDACK	Input	—		Bit clock input port. (If this port does not use, must be connect to 0 V.)
57	ASDFIN	Input	—		Left/Right channel data input port. (If this port does not use, must be connect to 0 V.)
58*	LRSY	Output	L	Digital data	Word clock output port.
59*	DATACK	Output	L		Bit clock output port.
60*	DATA	Output	L		Left/Right channel data output port.
61	CE	Input	—	Microcomputer Interface	Chip enable signal input port.
62	CL	Input	—		Data transfer clock input port.
63	DI	Input	—		Data input port.
64	DO	Output	(H)		Data output port. (N-ch. open drain output.)
65	*WRQ	Output	H		Interruption signal output.
66	*RES	Input	—	Chip reset signal input port. This port must be set LOW after first applied power on.	
67	DRF	Output	L	Focus detection output port.	
68	VDD5	Input	—	Power supply for Microprocessor.	
69	VSS	—	—	GND for digital circuit. Must be connected to 0 V.	
70	CONT3	Input/Output	Input	General purpose port 1.	Controlled with serial data command from micro-computer. When not used, General purpose input/ output terminal 7. set it as the input terminal and open it by connecting to 0 V, or set it as the output terminal and open it.
71	CONT2	Input/Output	Input	General purpose port 2.	
72*	CONT1	Input/Output	Input	General purpose port 3.	
73	PDO1	Output	—	PLL	Internal VCO control phase comparator output port 1.
74	PDO2	Output	Input		Internal VCO control phase comparator output port 2.
75	VVSS	—	—		GND for internal VCO. Must be connected to 0 V.
76	PCKIST	Input	—		PDO output current adjustment resistor connection port.
77	VVDD	Input	—		Power supply for internal VCO.
78	FR	Input	—		VCO frequency range adjustment port.
79	LDS	Input	—	LASER power detected signal input port.	
80	LDD	Output	—	LASER power control signal output port.	

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

Be sure to supply the same potential to each power terminal. (VVDD, ADAVDD, VDD, LVDD, RVDD, XVDD)
Terminal witch is controlled by the power terminal (VDD5V) for a microcomputer interface :
CE(61 pin), CL(62 pin), DI(63 pin), DO(64 pin), WRQ(65 pin), RES(66 pin), DRF(67 pin)

IC1 VHiLC78645E-1: CD Servo (LC78645E)



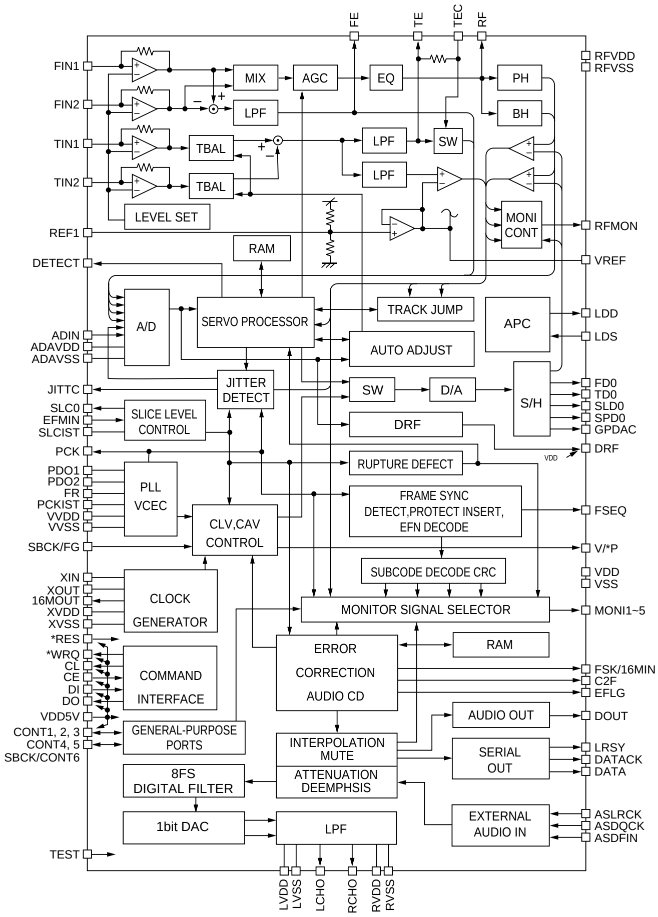


Figure 47 BLOCK DIAGRAM OF IC

IC701 RH-iX0460AWZZ: System Microcomputer (IX0460AW) (1/2)

Pin No.	Port Name	Terminal Name	Input/Output	Function
1	VDD	VDD	Input	(+) Power supply.
2	P37	-20 dB ATT	Output	-20 dB attenuator.
3	P36	NO USE	Output	GND
		DSA_STB	Input/Output	DSA strube
4	P35	T_BIAS	Output	Tape record BIAS.
5	P34	T_T1/T2	Output	Tape T1/T2 change.
6	P33	REC/PLAY	Output	Tape REC/PLAY change.
7	P32	RES OUT	Output	CD DSP RESET & MPEG microcomputer reset.
8	P31	DRF	Input	CD RF level detection.
9	P30	WRQ	Input	CD DSP write request.
10	RESET	RESET	Input	Reset
11	X2	X2	Output	Main clock.
12	X1	X1	Input	Main clock.
13	VPP/IC	XVPP/IC	—	GND
14*	XT2	XT2	—	Open
15	P04	SPN	Input	Tuner span change.
16	VDD	VDD	Input	(+) Power supply.
17	P27	CD CLK	Output	CD DSP clock.
18	P26	CD DI	Output	CD DSP commsnd.
19	P25	CD DO	Input	CD DSP code Q out.
20	P24	CD CE	Output	CD DSP CE output.
21	P23	CE	Output	CE output.
22	P22	CLK	Output	Clock output.
23	P21	DI	Output	Data output.
24	P20	DO	Input	Data input.
25	AVSS	AVSS	—	Analog ground.
26	ANI7	O/C SW	Input	CD open/Close switch.
		DISC NO SW	Input	CD disc number switch.
		DSA_DATA	Input/Output	DS data input.
27	ANI6	NO USE	Input	GND.
		TUNER SM	Input	Tuner signal meter input.
		DSA_ACK	Input/Output	DSA acr.
28	ANI5	SPEANA 2	Input	Speana data input 16 kHz.
29	ANI4	SPEANA 1	Input	Speana data input 1 kHz.
30	ANI3	SPEANA 0	Input	Speana data input 63 kHz.
31-33	ANI2-ANI0	KEY 2-KEY 0	Input	Key input.
34	AVDD	AVDD	Input	Analog VDD.
35	AVREF	AVREF	Input	Analog REF voltage.
36	INTP3	P_IN	Input	Power failure detect.
37	P02	JOG 1	Input	JOG volume input 1.
38	P01	JOG 0	Input	JOG volume input 0.
39	INTP0	REMOCON	Input	Remocon input.
40	VSS	VSS	—	Ground voltage.
41	P74	SMUTE	Output	System mute control.
42	P73	T_SOL_B	Output	Tape 2 solenoid control.
43	P72	T_SOL_A	Output	Tape 1 solenoid control.
44	P71	T_MOTOR	Output	Tape motor control.
45	P70	TIMER LED	Output	Timer LED control.
46	VDD	VDD	Input	(+) Power supply.
47*	P127	AC RLY_CONT	Output	AC relay control.
48	P126	SP-RLY	Output	Speaker output relay control.
49	P125	SP_DET	Input	Speaker output detection.

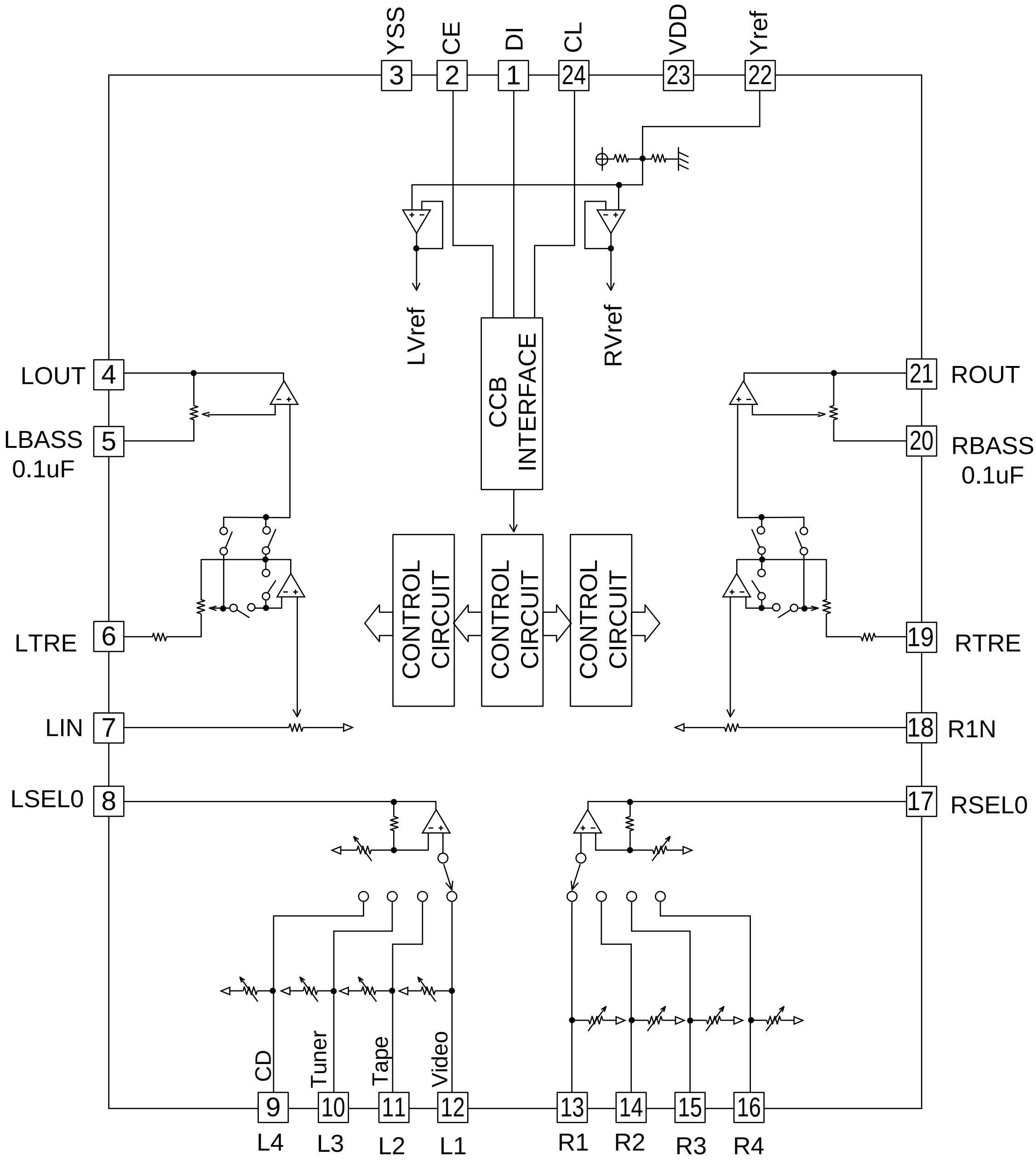
In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

IC701 RH-iX0460AWZZ: System Microcomputer (IX0460AW) (2/2)

Pin No.	Port Name	Terminal Name	Input/Output	Function
50	P124	T 1 RUN	Input	Tape 1 run pulse imput.
51	P123	T 2 RUN	Input	Tape 2 run pulse input.
52	P122	CD CLAMP SW	Input	CD changer clamp switch.
53	P121	XBAS-MONST	Input	X-BASS/Monster ekchange control. L:X-BASS, H:Monster
54	P120	PLAY SW_B	Input	PLAY switch for T2.
55	P117	FPA	Input	Tape 2 A-SIDE full proof.
56	P116	FPB	Input	Tape 2 B-SIDE full proof.
57	P115	MIC SW	Input	Mic switch.
58	P114	LCK 0	Output	LED driver lck.
59	P113	DISTOUT	Output	Destination output.
60	FIP39	NO USE	Output	GND
61	FIP38	KARAOKE LATCH	Output	Karaoke latch.
62	FIP37	NO USE	Output	GND
		MPEG_POW	Output	Mpeg power control.
63*	FIP36	NO USE	Output	GND
		RDS RST/ESS_ACE	Output	RDS fan reset/Dsa sys acenowledge.
64	FIP35	NO USE	Input	GND
		RDS RDDA/ESS_STB	Input	RDS transmit data input/dsa strobe.
65*	FIP34	NO USE	Output	GND
		RDS RDCL/ESS_DI	Output	RDS clock/Dsa data output.
66	FIP33	NO USE	Input	GND
		RDS READY/ESS_DO	Input	Ready/dsa data input.
67	P103	DIST3	Input	Destination input.
	FIP32	P22	Output	FL display driver.
68	P102	DIST2	Input	Destination input.
	FIP31	P21	Output	FL display driver.
69	P101	DIST1	Input	Destination input.
	FIP30	P20	Output	FL display driver.
70	P100	DIST0	Input	Destination input.
	FIP29	P19	Output	FL display driver.
71-78	FIP28-FIP21	P18-P11	Output	FL display driver.
79	VLOAD	VLOAD	Input	FL driver (-) power supp. -30 V
80-89	FIP20-FIP11	P10-P1	Output	FL display driver.
90-100	FIP10-FIP0	G11-G1	Output	FL display driver.

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

IC601 VHiLC75341/-1: Audio Processor (LC75341)



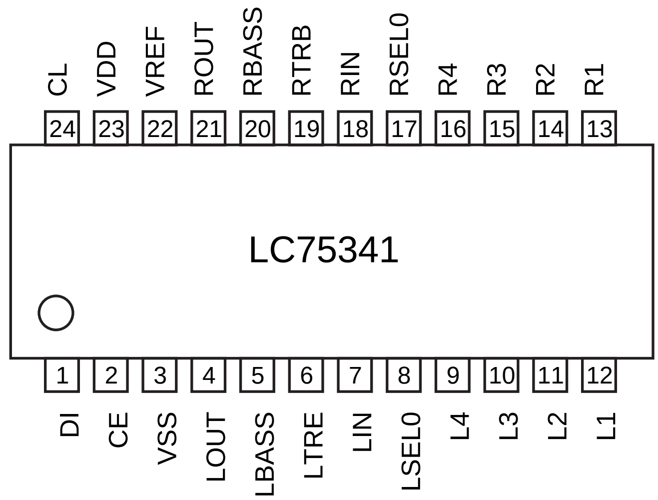


Figure 50 BLOCK DIAGRAM OF IC

ICK1 VHiM65856SP-1: Mic Amp. (M65856SP) (1/2)

Pin No.	Port Name	Input/Output	Function
1	MIC SW	Input	Microphone SW L: MIC OFF, H: MIC ON
2	MCLKCONT	—	Clock Control. Controls built-in clock generation circuit with external R.
3	VALC	—	ALC operating voltage setting terminal. To set ALC operating voltage according to applied voltage.
4	MIC1 IN	Input	Microphone 1 input. To connect MIC 1.
5*	ALC1	—	ALC1 control. To connect ALC1 attack/recovery time setting capacitor.
6*	MIC1NFIN	Input	Microphone 1 negative feedback input. To connect low cut-off frequency of MIC1 amplifier setting capacitor.
7*	MIC1 OUT	Output	Microphone 1 output.
8	MIC1 VOLIN	Input	Microphone 1 volume input. To connect capacitor to reduce noise generated at time of volume change.
9	MIC2 IN	Input	Microphone 2 input. To connect MIC 2.
10	ALC2	—	ALC2 control. To connect ALC2 attack/recovery time setting capacitor.
11	MIC2 NFIN	Input	Microphone 2 negative feedback input. To connect low cut-off frequency of MIC2 amplifier setting capacitor.
12	MIC2 OUT	Output	Microphone 2 output.
13	MIC2 VOLIN	Input	Microphone 2 volume input. To connect capacitor to reduce noise generated at time of volume change.
14	MICOUT	Output	Microphone output. Mixing output of MIC 1 and MIC 2.
15	LPF1IN1	Input	Low pass filter 1 input 1. Pre-filter before A/D convertor for digital delay.
16	LPF1 IN2	Input	Low pass filter 1 input 2. Pre-filter before A/D convertor for digital delay.
17	LPF1 OUT	Output	Low pass filter 1 output. Pre-filter before A/D convertor for digital delay.
18	AD INTOUT	Output	A/D integrator output. Composes D/A conversion integrator with external capacitor.
19	AD INTIN	Input	A/D integrator input. Composes D/A conversion integrator with external capacitor.
20	ADCONT	—	A/D control. To determine adaptive time constant of A/D convertor with ADM system.
21	REF	—	Reference power output. To connect 1/2 Vcc output and filter capacitor.
22	GND	—	Ground.
23	VCC	Input	Power supply.
24	DACONT	—	D/A control. To determine adaptive time constant of D/A convertor with ADM system .
25	DAINTIN	Input	D/A Integrator input. Composes D/A conversion integrator with external capacitor.
26	DAINTOUT	Output	D/A Integrator output. Composes D/A conversion integrator with external capacitor.
27	LPF2IN1	Input	Low pass filter 2 input 1. Post-filter after D/A convertor for digital delay.
28	LPF2IN2	Input	Low pass filter 2 input 2. Post-filter after D/A convertor for digital delay.
29	LPF2OUT	Output	Low pass filter 2 output. Post-filter after D/A convertor for digital delay.
30	VOLIN	Input	Echo effect/Echo feed back volume input. To connect capacitor to reduce noise generated at time of volume change.
31	L IN	Input	Lch line input.
32	R IN	Input	Rch line input.

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

ICK1 VHiM65856SP-1: Mic Amp. (M65856SP) (2/2)

Pin No.	Port Name	Input/Output	Function
33*	KEYCONIN	Input	Monaural input for external KEYCONTROL IC. Input/Output interface terminal for external KEYCONTROL IC.
34*	SOURCEOUT	Output	Monaural input for external KEYCONTROL IC. Input/Output interface terminal for external KEYCONTROL IC.
35	R OUT	Output	Rch mixing output.
36	L OUT	Output	Lch mixing output.
37	VCF IL	—	Vocal cut filter. Processes frequencies lower then the vocal band.
38*	PS1	Input	Phase shift input 1. Determines a constant at time of phase shift.
39*	PS2	Input	Phase shift input 2. Determines a constant at time of phase shift.
40	LATCH	Input	Latch input via serial bus.
41	CLOCK	Input	Clock input via serial bus.
42	DATA	Input	Data input via serial bus.

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

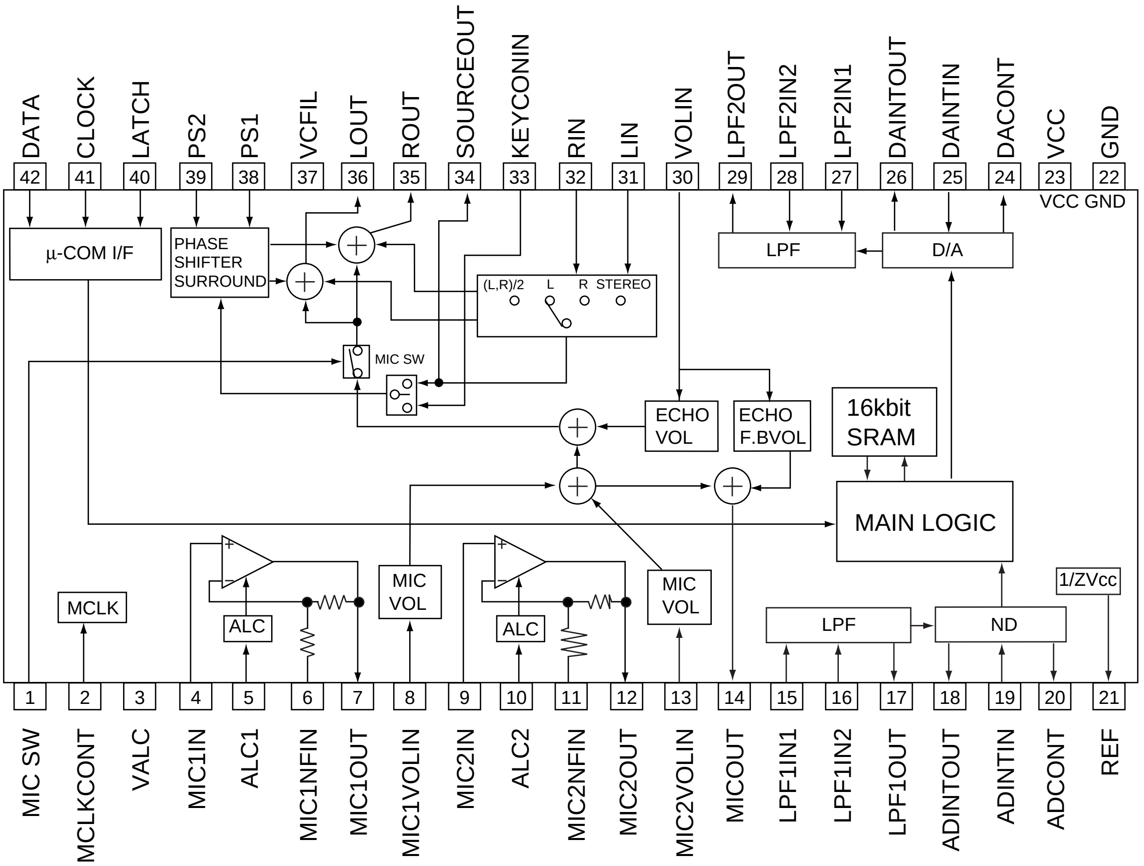
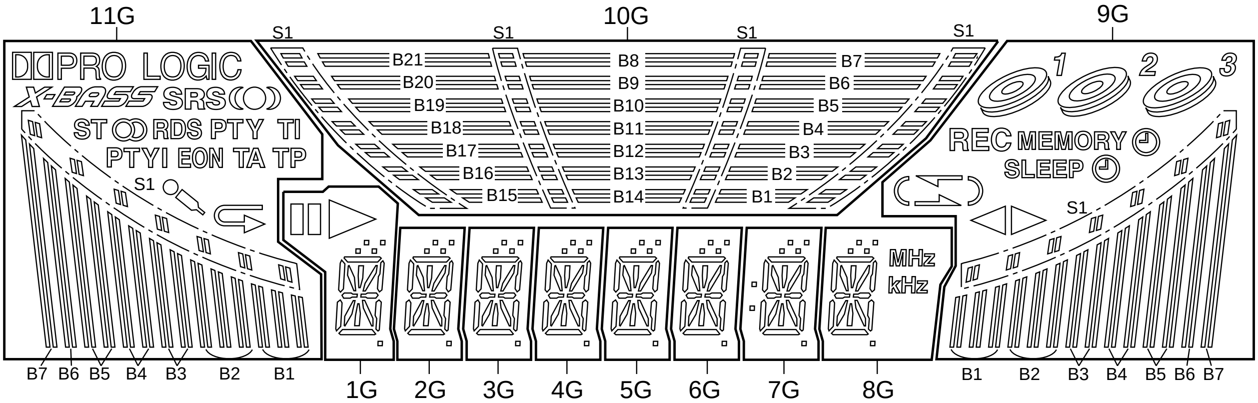
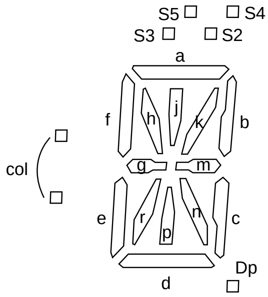


Figure 52 BLOCK DIAGRAM OF IC

FL DISPLAY

FL701 VVKBJ11LM02T1: FL Display





	11G	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G
P1	S1	S1	S1	Dp	Dp	Dp	Dp	Dp	Dp	Dp	Dp
P2	B1	B1	B1	d	d	d	d	d	d	d	d
P3	B2	B2	B2	c	c	c	c	c	c	c	c
P4	B3	B3	B3	n	n	n	n	n	n	n	n
P5	B4	B4	B4	p	p	p	p	p	p	p	p
P6	B5	B5	B5	r	r	r	r	r	r	r	r
P7	B6	B6	B6	e	e	e	e	e	e	e	e
P8	B7	B7	B7	m	m	m	m	m	m	m	m
P9		B8	1	g	g	g	g	g	g	g	g
P10	X-BASS	B9	2		col						
P11		B10	3	b	b	b	b	b	b	b	b
P12	ST	B11	REC	k	k	k	k	k	k	k	k
P13	◯◯	B12	MEMORY	j	j	j	j	j	j	j	j
P14	RDS	B13	◷ (Hiper)	h	h	h	h	h	h	h	h
P15	PTY	B14	◷ (Lower)	f	f	f	f	f	f	f	f
P16	TI	B15	SLEEP	a	a	a	a	a	a	a	a
P17	TP	B16	(	S2	S2	S2	S2	S2	S2	S2	S2
P18	TA	B17	⇄	S3	S3	S3	S3	S3	S3	S3	S3
P19	PTYI	B18	)	S4	S4	S4	S4	S4	S4	S4	S4
P20	EON	B19	◁	S5	S5	S5	S5	S5	S5	S5	S5
P21	🎤	B20	▷	MHz							▷
P22	⮌	B21		kHz							▯▯

— MEMO —

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Explanation of capacitors/resistors parts codes

Capacitors

VCC .... Ceramic type
VCK .... Ceramic type
VCT .... Semiconductor type
VC • • MF .... Cylindrical type (without lead wire)
VC • • MN .... Cylindrical type (without lead wire)
VC • • TV .... Square type (without lead wire)
VC • • TQ .... Square type (without lead wire)
VC • • CY .... Square type (without lead wire)
VC • • CZ .... Square type (without lead wire)
VC • • • • • • • • • J .. The 13th character represents capacity difference.
("J" ±5%, "K" ±10%, "M" ±20%, "N" ±30%,
"C" ±0.25 pF, "D" ±0.5 pF, "Z" +80-20%.)

If there are no indications for the electrolytic capacitors, error is ±20%.

Resistors

VRD .... Carbon-film type
VRS .... Carbon-film type
VRN .... Metal-film type
VR • • MF .... Cylindrical type (without lead wire)
VR • • MN .... Cylindrical type (without lead wire)
VR • • TV .... Square type (without lead wire)
VR • • TQ .... Square type (without lead wire)
VR • • CY .... Square type (without lead wire)
VR • • CZ .... Square type (without lead wire)
VR • • • • • • • • • J .. The 13th character represents error.
("J" ±5%, "F" ±1%, "D" ±0.5%.)

If there are no indications for other parts, the resistors are ±5% carbon-film type.

NOTE:
Parts marked with "⚠" are important for maintaining the safety of the set.
Be sure to replace parts with specified ones for maintaining the safety and performance of the set.

CD-M4000W

INTEGRATED CIRCUITS

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
IC1	VHILC78645E-1	J	AY	CD Servo,LC78645E
IC2	VHIM63001FP-1	J	AX	Focus/Tracking/Spin/Sled Driver, M63001FP
IC101	VHIAN7345K/-1	J	AM	Playback and Record/Playback Amp.,AN7345K
IC301	VHITA7358AP-1	J	AG	FM Front End,TA7358AP
IC302	VHILC72131/-1	J	AP	PLL (Tuner),LC72131
IC303	VHILA1832S/-1	J	AN	FM IF Det./FM Mpx./AM IF, LA1832S
IC601	VHILC75341/-1	J	AM	Audio Processor,LC75341
IC701	RH-IX0460AWZZ	J		System Microcomputer, IX0460AW
IC702	VHIBU2092F/-1	J	AM	Input/Output Expander,BU2092F
IC703,704	VHIKIA4558P-1	J	AC	Ope Amp.,KIA4558P
IC860	VHIKIA4558P-1	J	AC	Ope Amp.,KIA4558P
IC901	VHISTK41203-1	J		Power Amp.,STK41203
ICK1	VHIM65856SP-1	J	AX	Mic Amp.,M65856SP
ICK2	VHIKIA4558P-1	J	AC	Ope Amp.,KIA4558P

TRANSISTORS

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
Q1	VSKTA1266GR-1	J	AB	Silicon,PNP,KTA1266 GR
Q2	VSKTC3203Y/-1	J	AC	Silicon,NPN,KTC3203 Y
Q3	VSKRC102M//-1	J	AC	Digital,NPN,KRC102 M
Q103~106	VS2SC1845F/-1	J	AC	Silicon,NPN,2SC1845 F
Q107,108	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q109	VSKTA1266GR-1	J	AB	Silicon,PNP,KTA1266 GR
Q110,111	VSKRC104M//-1	J	AC	Digital,NPN,KRC104 M
Q121,122	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q124	VS2SA1015GR-1	J	AB	Silicon,PNP,2SA1015 GR
Q126	VSKRC104M//-1	J	AC	Digital,NPN,KRC104 M
Q128	VSKTC3203Y/-1	J	AC	Silicon,NPN,KTC3203 Y
Q302	VSKTC3194Y/-1	J	AD	Silicon,NPN,KTC3194 Y
Q360	VSKTA1266GR-1	J	AB	Silicon,PNP,KTA1266 GR
Q603~606	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q701~703	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q704,705	VSKTA1273Y/-1	J	AE	Silicon,PNP,KTA1273 Y
Q708	VSKTA1273Y/-1	J	AE	Silicon,PNP,KTA1273 Y
Q709	VSKRC102M//-1	J	AC	Digital,NPN,KRC102 M
Q803	VSKTA1274Y/-1	J	AE	Silicon,PNP,KTA1274 Y
Q850	VSKTC2026//-1	J	AF	Silicon,NPN,KTC2026
Q851	VHIKIA7810AP1	J	AF	Voltage Regulator,KIA7810AP
Q852	VHIKIA7805AP1	J	AF	Constant Voltage Regulator, KIA7805AP
Q862,863	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q864	VSKRC102M//-1	J	AC	Digital,NPN,KRC102 M
Q865	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q901~904	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q905	VSKRC107M//-1	J	AC	Digital,NPN,KRC107 M
Q907	VSKTC3203Y/-1	J	AC	Silicon,NPN,KTC3203 Y
QK1	VSKTC3203Y/-1	J	AC	Silicon,NPN,KTC3203 Y

DIODES

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
D1,2	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
D301,302	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
D305	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
D701~704	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
D712,713	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
D718	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
D720~723	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
D809	VHDTS6B04GM-1	J	AP	Silicon,TS6B04GM
D810	VHDD10XB60F-1	J	AL	Silicon,D10XB60F
D811~816	VHDDS1N404S-1	J	AB	Silicon,DS1N404S
D818	VHDDS1N404S-1	J	AB	Silicon,DS1N404S
D861~863	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
D864	VHDDS1N404S-1	J	AB	Silicon,DS1N404S
D901,902	VHDDS1N404S-1	J	AB	Silicon,DS1N404S
D907~909	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
D911~913	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
DK1,2	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
DT701	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
DT703	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
LED701,702	VHP4204UYT7-1	J	AD	LED,Yellow,4204UYT7
LED703,704	VHP31URT21+-1	J	AD	LED,Red,31URT21
LED705	VHP4204UYT7-1	J	AD	LED,Yellow,4204UYT7
LED706~708	VHP4204UGT7-1	J	AD	LED,Green,4204UGT7
LED722	VHP4204SRT7-1	J	AD	LED,Red,4204SRT7
ZD1	VHEDZ3R3BSB-1	J	AB	Zener,3.3V,DZ3.3BSB
ZD2	VHEDZ3R9BSB-1	J	AC	Zener,3.9V,DZ3.9BSB
ZD351	VHEDZ5R1BSB-1	J	AC	Zener,5.1V,DZ5.1BSB
ZD701	VHEMTZJ6R2C-1	J	AC	Zener,6.2V,MTZJ6.2C
ZD801	VHEDZ300BSB-1	J	AB	Zener,30V,DZ30BSB
ZD802	VHEDZ6R2BSA-1	J	AB	Zener,6.2V,DZ6.2BSA
ZD804	VHEDZ110BSB-1	J	AB	Zener,11V,DZ11BSB
ZD851	VHEDZ3R9BSB-1	J	AC	Zener,3.9V,DZ3.9BSB
ZD901,902	VHEDZ120BSB-1	J	AB	Zener,12V,DZ12BSB
ZD951	VHEDZ130BSB-1	J	AB	Zener,13V,DZ13BSB
ZDK1	VHEMTZJ5R6B-1	J	AD	Zener,5.6V,MTZJ5.6B

FILTERS

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
BF301	RFILR0008AWZZ	J	AE	Band Pass Filter
CF303	RFILF0124AFZZ	J	AD	FM IF,10.7 MHz
CF351	RFILF0003AWZZ	J	AK	FM IF
CF352	RFILA0009AWZZ	J	AE	AM IF

TRANSFORMERS

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
T301	RCILB0065AWZZ	J	AC	FM,OSC
T302	RCILI0017AWZZ	J	AB	FM IF
T303	RCILA0052AWZZ	J	AE	AM Tracking
T306	RCILB0067AWZZ	J	AD	AM,OSC
T351	RCILI0019AWZZ	J	AD	AM IF
⚠ T801	RTRNP0365AWZZ	J		Power

COILS

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
L1	VP-XHR82K0000	J	AC	0.82 µH
L104	VP-MK331K0000	J	AB	330 µH,Choke
L312	RCILR0056AWZZ	J	AB	FM RF
L351,352	VP-DH101K0000	J	AB	100 µH,Choke
L901,902	RCILZ0137AFZZ	J	AA	0.29 µH

VARIABLE RESISTOR

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
VRK1	92LVRR1674A	J	AF	20 kohms (B) [Mic Volume]

VARIABLE CAPACITORS

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
VD301	VHCSVC348S/-1	J	AK	Variable Capacitance,SVC348S
VD302,303	VHCKDV147B/-1	J	AH	Variable Capacitance,KDV147B

VIBRATORS

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
X351	92LCRSTL1425A	J	AF	Crystal,456 kHz
X352	RCRSP0019AWZZ	J	AF	Crystal,4.5 MHz
XL1	RCRM-0041AWZZ	J	AF	Ceramic,33.8688 MHz
XL701	RCRSP0003AWZZ	J	AH	Crystal,4.1943 MHz

CAPACITORS

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
C1	VCEAZA1EW476M	J	AB	47 µF,25V,Electrolytic
C2	VCTYMN1CY103N	J	AA	0.01 µF,16V
C3	VCEAZA1EW476M	J	AB	47 µF,25V,Electrolytic
C4	VCKYMN1HB102K	J	AA	0.001 µF,50V
C5	VCQYKA1HM473J	J	AB	0.047 µF,50V,Mylar
C6	VCTYPA1CX104K	J	AB	0.1 µF,16V
C8	VCTYMN1CX472K	J	AA	0.0047 µF,16V
C9	VCEAZA1AW107M	J	AB	100 µF,10V,Electrolytic
C10	VCEAZA1HW106M	J	AB	10 µF,50V,Electrolytic
C11	VCEAZA1HW224M	J	AB	0.22 µF,50V,Electrolytic
C12	VCCSPA1HL101J	J	AA	100 pF,50V
C13	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C14	RC-EZY107AF1A	J	AB	100 µF,10V,Electrolytic
C16	VCEAEA0JW337M	J	AD	330 µF,6.3V,Electrolytic
C18	VCEAZA1AW107M	J	AB	100 µF,10V,Electrolytic
C23,24	RC-EZY106AF1H	J	AB	10 µF,50V,Electrolytic
C25,26	VCTYMN1CX152K	J	AA	0.0015 µF,16V
C27	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C28	VCKYMN1HB101K	J	AA	100 pF,50V
C30	VCKYMN1HB101K	J	AA	100 pF,50V
C32~34	VCKYMN1HB101K	J	AA	100 pF,50V
C35	VCQYKA1HM473J	J	AB	0.047 µF,50V,Mylar
C36	VCEAZA1HW225M	J	AB	2.2 µF,50V,Electrolytic
C37	VCTYPA1CX104K	J	AB	0.1 µF,16V
C38	VCTYMN1CY103N	J	AA	0.01 µF,16V
C39	VCEAZA1AW107M	J	AB	100 µF,10V,Electrolytic
C40	VCEAZA0JW227M	J	AC	220 µF,6.3V,Electrolytic

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
C41	VCEAZA1AW107M	J	AB	100 µF,10V,Electrolytic
C42	VCTYMN1CY103N	J	AA	0.01 µF,16V
C44	VCKYMN1HB102K	J	AA	0.001 µF,50V
C48	VCKZPA1HF223Z	J	AA	0.022 µF,50V
C49	VCEAZA1EW476M	J	AB	47 µF,25V,Electrolytic
C50	VCCCPA1HH220J	J	AA	22 pF (CH),50V
C51	VCTYBT1EF223Z	J	AA	0.022 µF,25V
C101,102	VCKYMN1HB561K	J	AA	560 pF,50V
C105,106	VCKYMN1HB181K	J	AA	180 pF,50V
C107,108	VCKYMN1HB561K	J	AA	560 pF,50V
C111~114	VCKYMN1HB331K	J	AA	330 pF,50V
C115,116	VCEAZA1EW107M	J	AB	100 µF,25V,Electrolytic
C117,118	VCTYPA1EX333K	J	AA	0.033 µF,25V
C119,120	VCKYMN1HB561K	J	AA	560 pF,50V
C121,122	VCEAZA1HW105M	J	AB	1 µF,50V,Electrolytic
C123,124	VCTYPA1EX222K	J	AA	0.0022 µF,25V
C127	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C128	VCEAZA1HW335M	J	AB	3.3 µF,50V,Electrolytic
C131,132	VCKYMN1HB271K	J	AA	270 pF,50V
C133,134	VCEAZA1EW226M	J	AB	22 µF,25V,Electrolytic
C135,136	VCTYPA1CX223K	J	AA	0.022 µF,16V
C139,140	VCTYMN1CX332K	J	AA	0.0033 µF,16V
C141,142	VCEAZA1EW476M	J	AB	47 µF,25V,Electrolytic
C145	VCEAZA1HW226M	J	AB	22 µF,50V,Electrolytic
C146	VCEAZA1AW227M	J	AC	220 µF,10V,Electrolytic
C150	VCQPKA2AA822J	J	AA	0.0082 µF,100V,Polypropylene
C151	VCQYKA1HM393K	J	AB	0.039 µF,50V,Mylar
C152	VCEAZA1EW476M	J	AB	47 µF,25V,Electrolytic
C153	VCEAZA1CW107M	J	AC	100 µF,16V,Electrolytic
C154	VCKYPA1HF473Z	J	AB	0.047 µF,50V
C303	VCCCMN1HH100J	J	AA	10 pF (CH),50V
C304	VCTYMN1CY103N	J	AA	0.01 µF,16V
C305	VCCCMN1HH4R7C	J	AA	4.7 pF (CH),50V
C306	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C307	VCEAZA1CW106M	J	AC	10 µF,16V,Electrolytic
C308	VCCCMN1HH4R7C	J	AA	4.7 pF (CH),50V
C309	VCKYMN1HB102K	J	AA	0.001 µF,50V
C310	VCCCMN1HH150J	J	AA	15 pF (CH),50V
C311	VCCSMN1HL180J	J	AA	18 pF,50V
C312	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C313	VCCCMN1HH220J	J	AA	22 pF (CH),50V
C314,315	VCTYMN1CX472K	J	AA	0.0047 µF,16V
C316	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C317	VCKYMN1HB102K	J	AA	0.001 µF,50V
C318	VCKYMN1HB101K	J	AA	100 pF,50V
C323	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C324	VCCUMN1HJ8R2D	J	AA	8.2 pF (UJ),50V
C330	VCCUMN1HJ150J	J	AA	15 pF (UJ),50V
C331	VCKYPA1HF473Z	J	AB	0.047 µF,50V
C332	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C334	VCCUMN1HJ220J	J	AA	22 pF (UJ),50V
C335	VCKYMN1HB561K	J	AA	560 pF,50V
C338	VCKYMN1HB102K	J	AA	0.001 µF,50V
C342	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C350,351	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C352	VCEAZA1CW106M	J	AC	10 µF,16V,Electrolytic
C353,354	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C355	VCCSMN1HL220J	J	AA	22 pF,50V
C356	VCKYMN1HB102K	J	AA	0.001 µF,50V
C357	VCEAZA1HW225M	J	AB	2.2 µF,50V,Electrolytic
C358	VCEAZA1HW105M	J	AB	1 µF,50V,Electrolytic
C361	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C362	VCEAZA1HW335M	J	AB	3.3 µF,50V,Electrolytic
C363	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C364	VCEAZA1HW225M	J	AB	2.2 µF,50V,Electrolytic
C365	VCKYPA1HF223Z	J	AB	0.022 µF,50V
C366	VCKYMN1HB102K	J	AA	0.001 µF,50V
C367,368	VCEAZA1HW105M	J	AB	1 µF,50V,Electrolytic
C369	VCCUMN1HJ270J	J	AA	27 pF (UJ),50V
C370~372	VCEAZA1HW105M	J	AB	1 µF,50V,Electrolytic
C373,374	VCTYPA1CX183K	J	AA	0.018 µF,16V
C380	VCEAZA1CW106M	J	AC	10 µF,16V,Electrolytic
C381	VCCCMN1HH120J	J	AA	12 pF (CH),50V
C382	VCCCMN1HH150J	J	AA	15 pF (CH),50V
C385	VCTYMN1CY103N	J	AA	0.01 µF,16V
C386	VCKYMN1HB331K	J	AA	330 pF,50V
C387	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C388	VCKYMN1HB102K	J	AA	0.001 µF,50V
C391	VCEAZA1CW476M	J	AB	47 µF,16V,Electrolytic
C392	VCKYMN1HB102K	J	AA	0.001 µF,50V
C393	VCEAZA1HW105M	J	AB	1 µF,50V,Electrolytic
C394	VCEAZA1CW476M	J	AB	47 µF,16V,Electrolytic

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
C395	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C396	VCEAZA1AW107M	J	AB	100 µF,10V,Electrolytic
C397	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C398	VCEAZA1AW107M	J	AB	100 µF,10V,Electrolytic
C399	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C602	VCEAZA1EW226M	J	AB	22 µF,25V,Electrolytic
C605	VCEAZA1HW475M	J	AB	4.7 µF,50V,Electrolytic
C606	VCEAZA1CW107M	J	AC	100 µF,16V,Electrolytic
C607~610	VCQYKA1HM224K	J	AB	0.22 µF,50V,Mylar
C611,612	VCTYMN1CX152K	J	AA	0.0015 µF,16V
C613,614	VCEAZA1HW106M	J	AB	10 µF,50V,Electrolytic
C615,616	VCKYMN1HB102K	J	AA	0.001 µF,50V
C617	VCEAZA1HW225M	J	AB	2.2 µF,50V,Electrolytic
C618	VCEAZA1HW226M	J	AB	22 µF,50V,Electrolytic
C619,620	VCEAZA1HW105M	J	AB	1 µF,50V,Electrolytic
C621,622	VCEAZA1HW106M	J	AB	10 µF,50V,Electrolytic
C623~630	VCEAZA1HW105M	J	AB	1 µF,50V,Electrolytic
C631,632	VCKYMN1HB391K	J	AA	390 pF,50V
C635,636	VCKYMN1HB102K	J	AA	0.001 µF,50V
C641,642	VCCSPA1HL470J	J	AA	0.0033 µF,16V
C701	VCEAZA1EW476M	J	AB	47 µF,25V,Electrolytic
C702	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C714	VCEAZA1HW476M	J	AB	47 µF,50V,Electrolytic
C715	VCEAZA1HW226M	J	AB	22 µF,50V,Electrolytic
C719	VCEAZA1EW476M	J	AB	47 µF,25V,Electrolytic
C720,721	VCKYMN1HB102K	J	AA	0.001 µF,50V
C722	VCEAZA1HW476M	J	AB	47 µF,50V,Electrolytic
C723	VCCSMN1HL150J	J	AA	15 pF,50V
C724	VCCSMN1HL180J	J	AA	18 pF,50V
C725	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C726	VCEAZA1AW227M	J	AC	220 µF,10V,Electrolytic
C727	VCKYBT1HB471K	J	AA	470 pF,50V
C728	VCTYMN1CY103N	J	AA	0.01 µF,16V
C729	VCEAZA1HW335M	J	AB	3.3 µF,50V,Electrolytic
C732	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C733	VCEAZA1EW476M	J	AB	47 µF,25V,Electrolytic
C809,810	VCFYDA1HA224J	J	AB	0.22 µF,50V,Polyester
C811,812	VCQYKU2AM224K	J	AB	0.22 µF,100V,Mylar
C813,814	VCFYDA1HA224J	J	AB	0.22 µF,50V,Polyester
C815,816	VCEAZA1HW107M	J	AC	100 µF,50V,Electrolytic
C817	VCEAZV1JW227M	J	AC	220 µF,63V,Electrolytic
C818,819	VCEAZA1HW476M	J	AB	47 µF,50V,Electrolytic
C820	VCEAZA1VW107M	J	AC	100 µF,35V,Electrolytic
C850	RC-EZ0060AWZZ	J		2200 µF,35V,Electrolytic
C852	VCQYKA1HM473K	J	AB	0.047 µF,50V,Mylar
C855	VCQYKA1HM104K	J	AB	0.1 µF,50V,Mylar
C856	VCKYPA1HB101K	J	AA	100 pF,50V
C859	VCQYKA1HM102K	J	AA	0.001 µF,50V,Mylar
C860	RC-EZ0060AWZZ	J		2200 µF,35V,Electrolytic
C861	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C863,864	VCEAZA1HW226M	J	AB	22 µF,50V,Electrolytic
C865	VCEAZA1EW476M	J	AB	47 µF,25V,Electrolytic
C866	VCKYMN1HB102K	J	AA	0.001 µF,50V
C867	VCEAZA1HW105M	J	AB	1 µF,50V,Electrolytic
C901,902	RC-EZ0029AWZZ	J	AN	3300 µF,71V,Electrolytic
C903,904	RC-EZ0061AWZZ	J		4700 µF,35V,Electrolytic
C905	VCEAZA1HW104M	J	AB	0.1 µF,50V,Electrolytic
C911~914	VCCSPA1HL470J	J	AA	47 pF,50V
C915,916	VCEAZA1HW476M	J	AB	47 µF,50V,Electrolytic
C917,918	VCEAZA1HW224M	J	AB	0.22 µF,50V,Electrolytic
C919,920	VCEAZV2AW107M	J	AE	100 µF,100V,Electrolytic
C921,922	VCEAZA1HW107M	J	AC	100 µF,50V,Electrolytic
C923,924	VCQYKA1HM223J	J	AB	0.022 µF,50V,Mylar
C925	VCEAZA1HW476M	J	AB	47 µF,50V,Electrolytic
C927~930	VCQYKA1HM104K	J	AB	0.1 µF,50V,Mylar
C931~934	VCQYKA1HM223J	J	AB	0.022 µF,50V,Mylar
C935~938	VCFYHA1HA104J	J	AB	0.1 µF,50V,Thin Film
C939,940	VCCSPA1HL221J	J	AA	220 pF,50V
C943	VCEAZA1HW476M	J	AB	47 µF,50V,Electrolytic
C946	VCEAZA1AW107M	J	AB	100 µF,10V,Electrolytic
C952	VCEAZA1EW227M	J	AC	220 µF,25V,Electrolytic
C956,957	VCEAZV2AW107M	J	AE	100 µF,100V,Electrolytic
C958	VCEAZA1HW104M	J	AB	0.1 µF,50V,Electrolytic
CK1	VCTYPA1CX103K	J	AA	0.01 µF,16V
CK2	VCFYHA1HA474J	J	AD	0.47 µF,50V,Thin Film
CK3	VCKYBT1HB102K	J	AA	0.001 µF,50V
CK6	VCFYDA1HA104J	J	AB	0.1 µF,50V,Thin Film
CK7	VCFYHA1HA474J	J	AD	0.47 µF,50V,Thin Film
CK8	RC-EZY475AF1H	J	AB	4.7 µF,50V,Electrolytic
CK9	RC-EZY225AF1H	J	AB	2.2 µF,50V,Electrolytic
CK10,11	VCFYDA1HA104J	J	AB	0.1 µF,50V,Thin Film
CK12	RC-EZY225AF1H	J	AB	2.2 µF,50V,Electrolytic

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
CK13	VCTYPA1CX472K	J	AA	0.0047 μF,16V
CK14	VCTYPA1CX102K	J	AA	0.001 μF,16V
CK15	VCFYDA1HA683J	J	AB	0.068 μF,50V,Polyester
CK16	VCFYHA1HA224J	J	AC	0.22 μF,50V,Thin Film
CK17	VCEAEA1AW227M	J	AB	220 μF,10V,Electrolytic
CK18	VCEAEA1CW107M	J	AB	100 μF,16V,Electrolytic
CK19	VCTYBT1EF223Z	J	AA	0.022 μF,25V
CK20	VCFYHA1HA224J	J	AC	0.22 μF,50V,Thin Film
CK21	VCFYDA1HA683J	J	AB	0.068 μF,50V,Polyester
CK22	VCTYPA1CX472K	J	AA	0.0047 μF,16V
CK23	VCKYPA1HB102K	J	AA	0.001 μF,50V
CK24~26	VCEAZA1HW225M	J	AB	2.2 μF,50V,Electrolytic
CK29,30	VCEAZA1HW225M	J	AB	2.2 μF,50V,Electrolytic
CK31	VCFYDA1HA154J	J	AB	0.15 μF,50V,Polyester
CK33~35	VCCSBT1HL470J	J	AA	47 pF,50V
CK41	VCEAZA1CW107M	J	AC	100 μF,16V,Electrolytic
CK42	VCTYBT1EF223Z	J	AA	0.022 μF,25V
CK43,44	VCEAZA1EW476M	J	AB	47 μF,25V,Electrolytic
CK45,46	RC-EZY225AF1H	J	AB	2.2 μF,50V,Electrolytic
CK47,48	VCCSPA1HL221J	J	AA	220 pF,50V
CK49,50	VCCSPA1HL101J	J	AA	100 pF,50V
CK51,52	VCEAZA1HW105M	J	AB	1 μF,50V,Electrolytic
CK53	VCEAZA1HW476M	J	AB	47 μF,50V,Electrolytic
CK72	VCEAZA1CW107M	J	AC	100 μF,16V,Electrolytic
CS701,702	VCKYMN1HB271K	J	AA	270 pF,50V
CS703,704	VCTYMN1CX272K	J	AA	0.0027 μF,16V
CS705	VCTYMN1EF223Z	J	AA	0.022 μF,25V
CS706,707	VCEAZA1HW225M	J	AB	2.2 μF,50V,Electrolytic
CS708,709	VCTYMN1EF223Z	J	AA	0.022 μF,25V
CS710	VCEAZA1HW225M	J	AB	2.2 μF,50V,Electrolytic
CS711,712	VCTYMN1CX682K	J	AA	0.0068 μF,16V
CS713	VCTYMN1EF223Z	J	AA	0.022 μF,25V
CT1,2	VCTYPA1CX102K	J	AA	0.001 μF,16V

RESISTORS

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
	VRD-MN2BD000C	J	AA	0 ohm,Jumper,ø1.4×3.5mm,Ivory
R1,2	VRD-ST2CD822J	J	AA	8.2 kohms,1/6W
R3	VRD-ST2CD223J	J	AA	22 kohms,1/6W
R4,5	VRD-ST2CD822J	J	AA	8.2 kohms,1/6W
R6	VRD-ST2CD223J	J	AA	22 kohms,1/6W
R9	VRD-ST2CD3R3J	J	AA	3.3 ohms,1/6W
R10	VRD-ST2CD273J	J	AA	27 kohms,1/6W
R11	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R12	VRD-MN2BD331J	J	AA	330 ohms,1/8W
R13~17	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R18	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R19	VRD-ST2CD153J	J	AA	15 kohms,1/6W
R20	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R22	VRD-ST2CD101J	J	AA	100 ohm,1/6W
R23	VRD-MN2BD221J	J	AA	220 ohms,1/8W
R24,25	VRD-MN2BD222J	J	AA	2.2 kohms,1/8W
R26,27	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R28,29	VRD-ST2CD222J	J	AA	2.2 kohms,1/6W
R30	VRD-ST2CD822J	J	AA	8.2 kohms,1/6W
R31~38	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R39,40	VRD-MN2BD681J	J	AA	680 ohms,1/8W
R41	VRD-MN2BD123J	J	AA	12 kohms,1/8W
R42	VRD-MN2BD122J	J	AA	1.2 kohms,1/8W
R43	VRD-MN2BD221J	J	AA	220 ohms,1/8W
R44	VRD-ST2CD123J	J	AA	12 kohms,1/6W
R45,46	VRD-MN2BD471J	J	AA	470 ohms,1/8W
R47	VRD-MN2BD101J	J	AA	100 ohm,1/8W
R49	VRD-ST2EE1R0J	J	AA	1 ohm,1/4W
R65	VRD-ST2CD332J	J	AA	3.3 kohms,1/6W
⚠ R80	VRG-ST2EG3R3J	J	AB	3.3 ohms,1/4W,Fusible
R101	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R102	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R103,104	VRD-MN2BD222J	J	AA	2.2 kohms,1/8W
R105,106	VRD-MN2BD332J	J	AA	3.3 kohms,1/8W
R107,108	VRD-MN2BD473J	J	AA	47 kohms,1/8W
R109,110	VRD-MN2BD472J	J	AA	4.7 kohms,1/8W
R111	VRD-ST2CD153J	J	AA	15 kohms,1/6W
R112	VRD-MN2BD153J	J	AA	15 kohms,1/8W
R113,114	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R115	VRD-MN2BD472J	J	AA	4.7 kohms,1/8W
R117,118	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R119	VRD-ST2CD560J	J	AA	56 ohms,1/6W
R120	VRD-MN2BD560J	J	AA	56 ohms,1/8W
R121,122	VRD-MN2BD104J	J	AA	100 kohm,1/8W
R123,124	VRD-MN2BD392J	J	AA	3.9 kohms,1/8W
R125,126	VRD-MN2BD562J	J	AA	5.6 kohms,1/8W

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
R131,132	VRD-MN2BD123J	J	AA	12 kohms,1/8W
R134	VRD-MN2BD683J	J	AA	68 kohms,1/8W
R135,136	VRD-MN2BD472J	J	AA	4.7 kohms,1/8W
R137,138	VRD-MN2BD682J	J	AA	6.8 kohms,1/8W
R139,140	VRD-MN2BD152J	J	AA	1.5 kohms,1/8W
R141,142	VRD-MN2BD101J	J	AA	100 ohm,1/8W
R145,146	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R153	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R154	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R155	VRD-ST2EE151J	J	AA	150 ohms,1/4W
R156	VRD-MN2BD224J	J	AA	220 kohms,1/8W
R157	VRD-ST2CD224J	J	AA	220 kohms,1/6W
R158	VRD-ST2EE221J	J	AA	220 ohms,1/4W
R160	VRD-ST2EE820J	J	AA	82 ohms,1/4W
R162	VRD-MN2BD473J	J	AA	47 kohms,1/8W
R164	VRD-ST2CD472J	J	AA	4.7 kohms,1/6W
R166	VRD-MN2BD223J	J	AA	22 kohms,1/8W
R167	VRD-MN2BD473J	J	AA	47 kohms,1/8W
R168	VRD-ST2CD4R7J	J	AA	4.7 ohms,1/6W
R169~174	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R302	VRD-MN2BD100J	J	AA	10 ohm,1/8W
R309	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R311	VRD-MN2BD104J	J	AA	100 kohm,1/8W
R313	VRD-MN2BD333J	J	AA	33 kohms,1/8W
R314	VRD-ST2CD220J	J	AA	22 ohms,1/6W
R316	VRD-MN2BD472J	J	AA	4.7 kohms,1/8W
R322	VRD-MN2BD681J	J	AA	680 ohms,1/8W
R323	VRD-MN2BD683J	J	AA	68 kohms,1/8W
R325	VRD-MN2BD473J	J	AA	47 kohms,1/8W
R327	VRD-MN2BD330J	J	AA	33 ohms,1/8W
R336	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R350	VRD-MN2BD272J	J	AA	2.7 kohms,1/8W
R351	VRD-MN2BD562J	J	AA	5.6 kohms,1/8W
R352	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R353	VRD-MN2BD271J	J	AA	270 ohms,1/8W
R355	VRD-MN2BD332J	J	AA	3.3 kohms,1/8W
R356	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R357	VRD-ST2CD474J	J	AA	470 kohms,1/6W
R358	VRD-ST2CD392J	J	AA	3.9 kohms,1/6W
R359	VRD-MN2BD182J	J	AA	1.8 kohms,1/8W
R360	VRD-MN2BD472J	J	AA	4.7 kohms,1/8W
R361,362	VRD-MN2BD332J	J	AA	3.3 kohms,1/8W
R363,364	VRD-ST2CD682J	J	AA	6.8 kohms,1/6W
R365	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R368	VRD-ST2CD223J	J	AA	22 kohms,1/6W
R372~374	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R375	VRD-ST2CD471J	J	AA	470 ohms,1/6W
R376	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R377	VRD-MN2BD473J	J	AA	47 kohms,1/8W
R378	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R379	VRD-MN2BD222J	J	AA	2.2 kohms,1/8W
R380	VRD-MN2BD152J	J	AA	1.5 kohms,1/8W
R381	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R382	VRD-ST2EE151J	J	AA	150 ohms,1/4W
R383	VRD-MN2BD562J	J	AA	5.6 kohms,1/8W
R384	VRD-ST2CD562J	J	AA	5.6 kohms,1/6W
R385	VRD-MN2BD562J	J	AA	5.6 kohms,1/8W
R387	VRD-ST2CD562J	J	AA	5.6 kohms,1/6W
R388	VRD-MN2BD392J	J	AA	3.9 kohms,1/8W
R391,392	VRD-ST2EE271J	J	AA	270 ohms,1/4W
R393	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R395	VRD-MN2BD473J	J	AA	47 kohms,1/8W
R605,606	VRD-MN2BD392J	J	AA	3.9 kohms,1/8W
R607,608	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R609,610	VRD-ST2CD331J	J	AA	330 ohms,1/6W
R611,612	VRD-MN2BD152J	J	AA	1.5 kohms,1/8W
R613,614	VRD-MN2BD221J	J	AA	220 ohms,1/8W
R615,616	VRD-MN2BD222J	J	AA	2.2 kohms,1/8W
R617,618	VRD-MN2BD472J	J	AA	4.7 kohms,1/8W
R619,620	VRD-MN2BD223J	J	AA	22 kohms,1/8W
R621,622	VRD-MN2BD222J	J	AA	2.2 kohms,1/8W
R623,624	VRD-ST2CD472J	J	AA	4.7 kohms,1/6W
R625~627	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R631,632	VRD-MN2BD822J	J	AA	8.2 kohms,1/8W
R633,634	VRD-MN2BD393J	J	AA	39 kohms,1/8W
R637,638	VRD-MN2BD474J	J	AA	470 kohms,1/8W
R700	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R701	VRD-MN2BD104J	J	AA	100 kohm,1/8W
R702	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R703	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R704	VRD-MN2BD104J	J	AA	100 kohm,1/8W
R705	VRD-ST2CD102J	J	AA	1 kohm,1/6W

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
R706	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R708	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R713,714	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R716	VRD-MN2BD104J	J	AA	100 kohm,1/8W
R717,718	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R719	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R720	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R721	VRD-ST2CD472J	J	AA	4.7 kohms,1/6W
R724	VRD-ST2CD330J	J	AA	33 ohms,1/6W
R725	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R727,728	VRD-MN2BD473J	J	AA	47 kohms,1/8W
R736,737	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R738~745	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R746	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R747	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R748	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R749	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R751	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R752	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R753	VRD-MN2BD182J	J	AA	1.8 kohms,1/8W
R754	VRD-ST2CD222J	J	AA	2.2 kohms,1/6W
R755,756	VRD-ST2CD471J	J	AA	470 ohms,1/6W
R757	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R758~761	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R762	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R763~765	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R766~768	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R769	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R770	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R771~773	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R775~777	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R778	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R779~782	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R783~791	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R792,793	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R794	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R795	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R796	VRD-MN2BD473J	J	AA	47 kohms,1/8W
R797	VRD-MN2BD104J	J	AA	100 kohm,1/8W
R799	VRD-MN2BD101J	J	AA	100 ohm,1/8W
R802	VRD-ST2CD222J	J	AA	2.2 kohms,1/6W
R803	VRD-ST2CD123J	J	AA	12 kohms,1/6W
R805	VRD-ST2EE100J	J	AA	10 ohm,1/4W
R806	VRD-ST2CD224J	J	AA	220 kohms,1/6W
R807	VRD-ST2CD473J	J	AA	47 kohms,1/6W
R810,811	VRD-ST2EE470J	J	AA	47 ohms,1/4W
R819	VRD-ST2CD473J	J	AA	47 kohms,1/6W
R852,853	VRD-ST2CD223J	J	AA	22 kohms,1/6W
R854	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R855	VRD-RT2HD3R3J	J	AA	3.3 ohms,1/2W
R856	VRD-ST2EE681J	J	AA	680 ohms,1/4W
R861	VRD-MN2BD683J	J	AA	68 kohms,1/8W
R863	VRD-MN2BD333J	J	AA	33 kohms,1/8W
R865	VRD-ST2EE101J	J	AA	100 ohm,1/4W
R866	VRD-ST2EE331J	J	AA	330 ohms,1/4W
R867	VRD-ST2CD104J	J	AA	100 kohm,1/6W
R868,869	VRD-MN2BD562J	J	AA	5.6 kohms,1/8W
R870	VRD-MN2BD222J	J	AA	2.2 kohms,1/8W
R871	VRD-ST2EE103J	J	AA	10 kohm,1/4W
R873	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R874,875	VRD-MN2BD104J	J	AA	100 kohm,1/8W
R878,879	VRD-MN2BD223J	J	AA	22 kohms,1/8W
R880	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R901,902	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R903,904	VRD-ST2CD563J	J	AA	56 kohms,1/6W
R905,906	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R907,908	VRD-ST2CD391J	J	AA	390 ohms,1/6W
R909,910	VRD-ST2CD563J	J	AA	56 kohms,1/6W
⚠ R911,912	VRG-ST2EC101J	J	AB	100 ohm,1/4W,Fusible
R913~916	VRN-VV3LAR22J	J		0.22 ohms,3W
R917,918	VRN-VV3LAR10J	J	AD	0.1 ohm,3W
R919,920	VRD-ST2CD152J	J	AA	1.5 kohms,1/6W
R921,922	VRD-ST2CD182J	J	AA	1.8 kohms,1/6W
R923	VRD-ST2CD563J	J	AA	56 kohms,1/6W
R925~928	VRD-RT2HD100J	J	AA	10 ohm,1/2W
R929,930	VRD-ST2CD563J	J	AA	56 kohms,1/6W
R931,932	VRD-RT2HD100J	J	AA	10 ohm,1/2W
R933,934	VRD-ST2CD222J	J	AA	2.2 kohms,1/6W
R935,936	VRD-ST2CD473J	J	AA	47 kohms,1/6W
R937	VRD-ST2CD153J	J	AA	15 kohms,1/6W
R938	VRD-ST2CD683J	J	AA	68 kohms,1/6W
R939	VRD-ST2CD222J	J	AA	2.2 kohms,1/6W

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
R940	VRD-RT2HD221J	J	AA	220 kohms,1/2W
R941,942	VRS-VV3DA561J	J	AC	560 ohms,2W
R943	VRS-VV3DA681J	J	AC	680 ohms,2W
R944	VRD-ST2CD333J	J	AA	33 kohms,1/6W
R945~948	VRD-RT2HD3R9J	J	AA	3.9 ohms,1/2W
R949	VRD-ST2CD474J	J	AA	470 kohms,1/6W
R950	VRD-ST2CD122J	J	AA	1.2 kohms,1/6W
R951,952	VRD-ST2CD392J	J	AA	3.9 kohms,1/6W
R953,954	VRD-RT2HD100J	J	AA	10 ohm,1/2W
RD01	VRD-MN2BD681J	J	AA	680 ohms,1/8W
RD02	VRD-MN2BD821J	J	AA	820 ohms,1/8W
RD03	VRD-MN2BD102J	J	AA	1 kohm,1/8W
RD04	VRD-MN2BD152J	J	AA	1.5 kohms,1/8W
RD05	VRD-MN2BD222J	J	AA	2.2 kohms,1/8W
RD06	VRD-MN2BD272J	J	AA	2.7 kohms,1/8W
RD07	VRD-MN2BD392J	J	AA	3.9 kohms,1/8W
RD08	VRD-MN2BD562J	J	AA	5.6 kohms,1/8W
RD09	VRD-MN2BD103J	J	AA	10 kohm,1/8W
RD10	VRD-MN2BD183J	J	AA	18 kohms,1/8W
RD11	VRD-MN2BD333J	J	AA	33 kohms,1/8W
RD12	VRD-MN2BD104J	J	AA	100 kohm,1/8W
RD13	VRD-MN2BD681J	J	AA	680 ohms,1/8W
RD14	VRD-MN2BD821J	J	AA	820 ohms,1/8W
RD15	VRD-ST2CD184J	J	AA	180 kohms,1/6W
RD25	VRD-MN2BD681J	J	AA	680 ohms,1/8W
RD26	VRD-MN2BD821J	J	AA	820 ohms,1/8W
RD27	VRD-MN2BD102J	J	AA	1 kohm,1/8W
RD28	VRD-MN2BD152J	J	AA	1.5 kohms,1/8W
RD29	VRD-MN2BD222J	J	AA	2.2 kohms,1/8W
RD30	VRD-MN2BD272J	J	AA	2.7 kohms,1/8W
RD31	VRD-MN2BD392J	J	AA	3.9 kohms,1/8W
RD32	VRD-MN2BD562J	J	AA	5.6 kohms,1/8W
RD33	VRD-MN2BD103J	J	AA	10 kohm,1/8W
RD34	VRD-MN2BD153J	J	AA	15 kohms,1/8W
RD35	VRD-MN2BD333J	J	AA	33 kohms,1/8W
RD36	VRD-MN2BD104J	J	AA	100 kohm,1/8W
RK1	VRD-ST2CD103J	J	AA	10 kohm,1/6W
RK2,3	VRD-ST2CD563J	J	AA	56 kohms,1/6W
RK4	VRD-ST2CD103J	J	AA	10 kohm,1/6W
RK5	VRD-ST2CD102J	J	AA	1 kohm,1/6W
RK7	VRD-ST2CD102J	J	AA	1 kohm,1/6W
RK8	VRD-ST2CD562J	J	AA	5.6 kohms,1/6W
RK9~11	VRD-ST2CD102J	J	AA	1 kohm,1/6W
RK12	VRD-ST2CD101J	J	AA	100 ohm,1/6W
RK13	VRD-ST2CD122J	J	AA	1.2 kohms,1/6W
RK14,15	VRD-RT2HD101J	J	AA	100 ohm,1/2W
RK36,37	VRD-ST2CD391J	J	AA	390 ohms,1/6W
RK38	VRD-ST2CD101J	J	AA	100 ohm,1/6W
RK39,40	VRD-ST2CD102J	J	AA	1 kohm,1/6W
RK41,42	VRD-ST2CD103J	J	AA	10 kohm,1/6W
RK43	VRD-ST2CD183J	J	AA	18 kohms,1/6W
RK44,45	VRD-ST2CD682J	J	AA	6.8 kohms,1/6W
RK46	VRD-ST2CD183J	J	AA	18 kohms,1/6W
RK47	VRD-ST2CD822J	J	AA	8.2 kohms,1/6W
RK48~50	VRD-ST2CD103J	J	AA	10 kohm,1/6W
RL701~705	VRD-ST2CD102J	J	AA	1 kohm,1/6W
RL706~708	VRD-MN2BD102J	J	AA	1 kohm,1/8W
RS701	VRD-MN2BD333J	J	AA	33 kohms,1/8W
RS702	VRD-MN2BD103J	J	AA	10 kohm,1/8W
RS703	VRD-MN2BD683J	J	AA	68 kohms,1/8W
RS704	VRD-MN2BD224J	J	AA	220 kohms,1/8W
RS705	VRD-MN2BD123J	J	AA	12 kohms,1/8W
RS706	VRD-MN2BD224J	J	AA	220 kohms,1/8W
RS707	VRD-MN2BD394J	J	AA	390 kohms,1/8W
RS708	VRD-ST2EE271J	J	AA	270 ohms,1/4W
RS709	VRD-MN2BD154J	J	AA	150 kohms,1/8W
RS710	VRD-ST2EE271J	J	AA	270 ohms,1/4W
RS711	VRD-MN2BD104J	J	AA	100 kohm,1/8W
RS712	VRD-MN2BD824J	J	AA	820 kohms,1/8W
RS713	VRD-ST2CD104J	J	AA	100 kohm,1/6W
RS714	VRD-MN2BD225J	J	AA	2.2 Mohms,1/8W
RS715	VRD-MN2BD104J	J	AA	100 kohm,1/8W
RS716	VRD-MN2BD105J	J	AA	1 Mohm,1/8W
RS717	VRD-MN2BD474J	J	AA	470 kohms,1/8W
RS718	VRD-MN2BD563J	J	AA	56 kohms,1/8W
RS719	VRD-ST2CD153J	J	AA	15 kohms,1/6W
RS720	VRD-MN2BD184J	J	AA	180 kohms,1/8W

OTHER CIRCUITRY PARTS

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
BI4/CNS4	QCNWN1572AWZZ	J	AF	Connector Ass’y,6/6Pin
BI11/CNS11	QCNWN1924AWZZ	J		Connector Ass’y,6/6Pin

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
BI102/CNS102	QCNWN1974AWZZ	J	AM	Connector Ass'y,7/6Pin
BI602/CNS602	QCNWN1876AWZZ	J	AH	Connector Ass'y,10/10Pin
BI703/CNS703	QCNWN1843AWZZ	J	AH	Connector Ass'y,9/9Pin
BI704/CNS704	QCNWN2038AWZZ	J		Connector Ass'y,3/3Pin
BI705/CNS705	QCNWN2033AWZZ	J		Connector Ass'y,4/4Pin
BI901/CNS901	QCNCW010NAWZZ	J	AC	Socket,13Pin
BI902/CNS902	QCNWN2034AWZZ	J		Connector Ass'y,4/4Pin
BI903/CNS903	QCNWN1917AWZZ	J		Connector Ass'y,8/8Pin
CNP1	QCNCM704GAWZZ	J	AC	Plug,7Pin
CNP2	QCNCM704HAWZZ	J	AC	Plug,8Pin
CNP3	92LCONE6P53253	J	AC	Plug,6Pin
CNP3A	92LCONE6P53254	J	AC	Plug,6Pin
CNP4	QCNCM705FAFZZ	J	AB	Plug,6Pin
CNP7	92LCONE6P53254	J	AC	Plug,6Pin
CNP8	92LCONE9P53254	J	AD	Plug,9Pin
CNP101	QCNCM705CAFZZ	J	AA	Plug,3Pin
CNP301	92LCONE2P5268	J	AB	Plug,2Pin
CNP601	QCNCWZX21AWZZ	J	AD	Plug,21Pin
CNP701	QCNCWZF21AWZZ	J	AF	Socket,21Pin
CNP702	QCNCWZY10AWZZ	J	AC	Socket,10Pin
CNP704	92LCONE3P53253	J	AB	Plug,3Pin
CNP705	92LCONE5P52287	J	AC	Socket,5Pin
CNP901	QCNCM010NAWZZ	J	AC	Plug,13Pin
CNP902	92LCONE4P5267X	J	AB	Plug,4Pin
CNP903	92LCONE8P5267	J		Socket,8Pin
CNP904	92LCONE2P53253	J	AB	Plug,2Pin
CNP905	92LCONE4P53253	J	AB	Plug,4Pin
CNPK1	QCNCM705KAWZZ	J	AC	Plug,10Pin
CNS1A/B	QCNWN1537AWZZ	J	AG	Connector Ass'y,7/7Pin
CNS2A/B	QCNWN1538AWZZ	J	AG	Connector Ass'y,8/8Pin
CNS3A/B	QCNWN1539AWZZ	J	AE	Connector Ass'y,6/6Pin
CNS901	QCNCW010NAWZZ	J	AC	Connector,13Pin
CNS904	QCNWN1582AWZZ	J	AC	Connector,2Pin
⚠ F801	QFS-D502CAWNI	J	AC	Fuse,T5A L 250V
⚠ F802,803	QFS-D252CAWNI	J	AC	Fuse,T2.5A L 250V
⚠ F804,805	QFS-D502CAWNI	J	AC	Fuse,T5A L 250V
⚠ F806,807	QFS-D202CAWNI	J	AC	Fuse,2A L 250V
FC701	QCNWN2035AWZZ	J		Flat Cable,21Pin
FC702	QCNWN1845AWZZ	J	AE	Flat Cable,10Pin
FL701	VVKBJ11LM02T1	J	BC	FL Display
FW902	QCNWN1927AWZZ	J		Flat Wire,5Pin
JK1	QJAKJ0007AWZZ	J	AF	Jack,Mic
JK601	QSOCJ0224AWZZ	J		Jack,Video/AUX
JK670	QJAKM0004AWZZ	J	AK	Jack,Headphones
JOG701	QSW-Z0014AWZZ	J	AF	Switch,Push Type [Jog,Volume]
LG1	QLUGP0001AWZZ	J	AC	Lug
⚠ LG801,802	92LLUG1746A	J	AA	Lug Terminal
LG901	QLUGP0001AWZZ	J	AC	Lug
M1	92LMTR2790CASY	J	BB	Motor with Chassis [Spindle]
M2	92LMTR1854BASY	J	AP	Motor with Gear [Sled]
M3	92LTWMEN7E6Y	J	AR	Motor with Worm Pulley [CD Loading]
M901	RMOTV0027AWZZ	J	AM	Motor,Air Cooling Fan
PINK1	QLUGP0002AWZZ	J	AB	Lug
RL901	RRLYD0014AWZZ	J	AK	Relay
RX701	VHLN63H380A-1	J	AK	Remote Sensor,N63H380A
SO301	QTANC0206AWZZ	J	AD	Terminal,FM Antenna
SO901	QTANA0415AWZZ	J	AD	Terminal,Speaker
SW1	SWMPU10780MLB	J	AH	Switch,Push Type [Open/Close]
SW2	SWMPU11470MLB	J	AE	Switch,Push Type [Clamp]
SW3	SWMPU11470MLB	J	AE	Switch,Push Type [Disc Number]
SW4	QSW-F9001AW01	J	AD	Switch,Leaf Type [Pickup In]
SW601	QSW-S0024AWZZ	J	AE	Switch,Slide Type [Span Selector]
SW701	92LSWICHT1663T	J	AC	Switch,Key Type [ON/Stand-by]
SW702	92LSWICHT1663T	J	AC	Switch,Key Type [Clock]
SW703	92LSWICHT1663T	J	AC	Switch,Key Type [Timer]
SW709	92LSWICHT1663T	J	AC	Switch,Key Type [Disc 1]
SW710	92LSWICHT1663T	J	AC	Switch,Key Type [Disc 2]
SW711	92LSWICHT1663T	J	AC	Switch,Key Type [Disc 3]
SW712	92LSWICHT1663T	J	AC	Switch,Key Type [Disc Skip]
SW713	92LSWICHT1663T	J	AC	Switch,Key Type [Open/Close]
SW714	92LSWICHT1663T	J	AC	Switch,Key Type [Dimmer]
SW715	92LSWICHT1663T	J	AC	Switch,Key Type [Monster Bass]
SW716	92LSWICHT1663T	J	AC	Switch,Key Type [Equalizer]
SW717	92LSWICHT1663T	J	AC	Switch,Key Type [Reverse Mode]
SW722	92LSWICHT1663T	J	AC	Switch,Key Type [CD]
SW723	92LSWICHT1663T	J	AC	Switch,Key Type [Tape]
SW724	92LSWICHT1663T	J	AC	Switch,Key Type [Tuning Down]
SW725	92LSWICHT1663T	J	AC	Switch,Key Type [Memory Set]
SW726	92LSWICHT1663T	J	AC	Switch,Key Type [Fast Rewind]
SW727	92LSWICHT1663T	J	AC	Switch,Key Type [Fast Forward]
SW728	92LSWICHT1663T	J	AC	Switch,Key Type [Play]
SW729	92LSWICHT1663T	J	AC	Switch,Key Type [Stop]
SW730	92LSWICHT1663T	J	AC	Switch,Key Type [Reverse Play]
SW731	92LSWICHT1663T	J	AC	Switch,Key Type [REC/Pause]
SW732	92LSWICHT1663T	J	AC	Switch,Key Type [Tuning Up]
SW733	92LSWICHT1663T	J	AC	Switch,Key Type [Video]
SW734	92LSWICHT1663T	J	AC	Switch,Key Type [Tuner]
⚠ SW801	QSOCE0008AWZZ	J	AH	Switch,Slide Type [Voltage Selector]

CD MECHANISM PARTS

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
301	NGERH0011AWZZ	J	AC	Gear,Middle
302	NGERH0012AWZZ	J	AC	Gear,Drive
303	MLEVP0080AWZZ	J	AC	Rail,Guide
304	NSFTM0020AWFW	J	AD	Shaft,Guide
305	92LM-CUSN1524A	J	AC	Cushion
⚠ 306	92LHPC1LXASY	J	BD	Pickup Unit Ass'y
306- 1	————		—	Pickup Unit (Not Replacement Item)
306- 2	NGERR0043AFZZ	J	AC	Gear,Rack
306- 3	MSPRC0961AFZZ	J	AA	Spring,Rack
701	XBSSD26P06000	J	AA	Screw,ø2.6×6mm
702	XHBSD20P05000	J	AA	Screw,ø2×5mm
703	XBBSD20P03000	J	AA	Screw,ø2×3mm
704	LX-WZ1070AFZZ	J	AA	Washer,ø1.5×3.8×0.25mm
M1	92LMTR2790CASY	J	BB	Motor with Chassis [Spindle]
M2	92LMTR1854BASY	J	AP	Motor with Gear [Sled]
SW4	QSW-F9001AW01	J	AD	Switch,Leaf Type [Pickup In]

CABINET PARTS

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
201	92LCAB3754AASY	J		Front Cabinet Ass'y
201- 1	————		—	Front Panel (Not Replacement Item)
201- 2	GDORF0097AWSA	J	AE	Holder,Cassette [Tape 1]
201- 3	GDORF0098AWSA	J	AE	Holder,Cassette [Tape 2]
201- 4	GCOVA1352AWSA	J	AH	Cover,Cassette [Tape 1]
201- 5	GCOVA1384AWSA	J	AK	Cover,Cassette [Tape 2]
201- 6	HDECQ0670AWSA	J	AE	Panel,Cassette [Tape 1]
201- 7	HDECQ0671AWSA	J	AE	Panel,Cassette [Tape 2]
201- 8	HDECQ0784AWSA	J		Panel,Amp.
201- 9	JKNBZ0820AWSA	J	AE	Button,ON/Stand-by
201-10	JKNBZ0766AWSA	J	AG	Button,Dimmer/Tuning
201-11	JKNBZ0768AWSA	J	AE	Button,Function
201-12	HDECQ0674AWSA	J	AE	Volume Ring
201-13	JKNBZ0800AWSA	J	AF	Button,Disc Control
201-14	JKNBZ0801AWSA	J	AG	Button,Center Operation
201-15	MLIFP0008AWZZ	J	AD	Damper
201-16	JKNBZ0834AWSA	J		Button,Equalizer/Monster Bass
201-17	92LBADGE1671A	J	AC	Badge,SHARP
201-18	GCOVA1339AWSA	J	AB	Cover,LED,Power
201-19	GCOVA1380AWSA	J	AB	Cover,LED,A
201-20	GCOVA1381AWSA	J	AB	Cover,LED,B
201-21	LHLDZ1327AWZZ	J	AE	Holder,Button Block
201-22	MLOKC0006AWZZ	J	AB	Lock Lever,Cassette [Tape 1]
201-23	MLOKC0007AWZZ	J	AB	Lock Lever,Cassette [Tape 2]
201-24	LHLDZ1328AWZZ	J	AC	Holder,Cassette Lock
201-25	GCOVA1382AWSA	J	AB	Cover,LED,C
201-26	GCOVA1344AWSA	J	AB	Cover,Disc No.LED,A
201-27	GCOVA1345AWSA	J	AB	Cover,Disc No.LED,B
201-28	GCOVA1346AWSA	J	AB	Cover,Disc No.LED,C
201-29	GCOVA1394AWSA	J	AD	Cover,Remote Control Sensor
201-30	MSPRC0029AWFJ	J	AB	Spring,Cassette Lock
201-31	JKNBK0084AWSA	J	AE	Button,Volume
201-32	GCOVA1404AWSA	J		Cover,Monster Button
201-33	MSPRD0167AWFJ	J	AB	Spring,Cassette [Tape 1]
201-34	MSPRD0168AWFJ	J	AB	Spring,Cassette [Tape 2]
202	92LCAB3552BASY	J	AM	Side Panel Ass'y,Left
202- 1	————		—	Side Panel,Left (Not Replacement Item)
202- 2	PCUSG0022AWZZ	J	AB	Cushion,Leg
203	92LCAB3552CASY	J	AM	Side Panel Ass'y,Right
203- 1	————		—	Side Panel,Right (Not Replacement Item)
203- 2	PCUSG0022AWZZ	J	AB	Cushion,Leg
204	GCAB-1192AWSA	J	AN	Top Cabinet
206	GCOVA1338AWSA	J	AH	Cover,CD Tray
207	GITAR0792AWSA	J		Rear Panel [Except for Philippines/russia]
207	GITAR0854AWSA	J		Rear Panel [For Philippines]

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
207	GITAR0855AWSA	J		Rear Panel [For Russia]
209	LANGK0057AWFW	J	AE	Bracket,Main Heat Sink [Left]
210	LANGK0058AWFW	J	AE	Bracket,Main Heat Sink [Right]
211	LANGK0239AWFW	J	AF	Bracket,Fan Support
212	LBSHC0002AWZZ	J	AD	Bushing,AC Power Supply Cord
213	LCHSM0139AWFW	J		Chassis,Main
214	LHLDZ1332AWZZ	J	AD	Holder,FL Display
215	QCNWN2030AWZZ	J		Lug Wire
218	NFANP0001AWZZ	J	AD	Rotary Fan
219	PCUSG0022AWZZ	J	AB	Cushion,Leg
220	PRDAR0224AWFW	J		Heat Sink,Main
221	PRDAR0158AWFW	J	AK	Heat Sink,Sub
⚠ 222	QACCA0003AW00	J	AL	AC Power Supply Cord
⚠ 222	QACCE0008AW00	J	AG	AC Power Supply Cord
⚠ 222	QACCL0005AW00	J	AN	AC Power Supply Cord
223	QCNWN1844AWZZ	J	AC	Lug Wire
⚠ 224	QFSHD0001AWZZ	J	AB	Holder,Fuse
225	92LBE231616	J	AD	Belt
226	92LCSPR1431C	J	AA	Spring,Ring
227	92LEVA0330702	J	AD	Velvet Carpet,Chassis
228	92LMAG0104302	J	AE	Magnet
229	92LMT0304302	J	AB	Plate,Metal
230	92LNBAND1318A	J	AA	Nylon Band,80mm
231	TWPT0312005	J		Cam Gear Ass'y
231- 1	92LPT0312005	J	AL	Gear,Cam
231- 2	92LSP0304303	J	AB	Spring,Stopper
231- 3	92LPT0304304	J	AB	Stopper
231- 4	92LNM0305401	J	AB	Velvet Carpet
231- 5	92LPT0305413	J	AG	Cam Gear Lower
232	92LPT0303002	J	AB	Roller
233	92LPT0304303	J	AB	Lever,Stop
235	92LPT0304305	J	AE	Lever,Lock
236	92LPT0304306	J	AG	Stabilizer
237	92LPT0304307	J	AC	Support,Cam
238	92LPT0304308	J	AB	Lock Gear Pin
239	92LPT0304309	J	AB	Cap,Pulley Stopper
241	92LPT0309506	J	AD	Gear,Turntable Drive
242	92LPT0309507	J	AD	Gear,Open/Close Drive
243	92LPT0309508	J	AD	Gear,Planet
244	92LPT0309509	J	AD	Gear,Drive
245	92LPT0309510	J	AE	Gear,Pulley
246	92LPT0309511	J	AD	Gear,Middle
247	92LPT0311101	J	AB	Lever,Clamp
248	92LPT0311102	J	AC	Lever,Disc
250	92LPT0320201	J	AE	Support,Stabilizer
251	92LPT0330301	J	AU	Chassis,Loading
252	92LPT0330803	J	AK	CD,Chassis
253	92LPT0331003	J	AT	Shassis,Slide
254	92LPT0331105	J	AM	Turntable
256	92LSP0304305	J	AB	Spring,Lock
257	92LSP0304306	J	AB	Spring,Lock Gear
258	KMECB0019AWZZ	J	BH	Tape Mechanism Ass'y
258- 1	92PF513-853	J	BL	Head Plate Block [Tape 2]
258- 2	92PF525-336	J	AV	Motor with Pulley [Tape]
258- 3	92PF567-677	J	AR	Tape Mechanism PWB Ass'y
258- 4	92PFF19N-21	J	AE	Belt,Main [Tape 2]
258- 5	92PF514-133	J	AL	Pinch Roller
258- 6	92PF19S-31	J	AL	Belt,FF/REW [Tape 2]
258- 7	92PFF19N-11	J	AL	Belt,Main [Tape 1]
258- 8	92PF522-061	J	AZ	Clutch Ass'y Block [Tape 1]
258- 9	92PFF19S-52	J	AL	Belt,FF/REW [Tape 1]
258-10	92PF513-861	J	AG	Head Plate Block [Tape 1]
258-11	92PF522-063	J	AZ	Clutch Ass'y Block [Tape 2]
259	92LCAUT1706A1	J	AC	Label,Class 3
260	92LCAUT1706B	J	AA	Label,Laser
261	TSPC-0963AWZZ	J		Label,Specification [For Thailand]
261	TSPC-0964AWZZ	J		Label,Specification [Except for Thailand]
262	JKNBK0012AWSG	J	AK	Knob,Karaoke
263	LHLDZ1320AWZZ	J	AC	Holder,Disc No.LED
264	LHLDK9001AW00	J	AB	Holder,CD Digital Output
265	LANGF0055AWFW	J		Bracket,Power PWB Support
266	LHLDF1019AWSA	J		Holder,Main PWB Support
267	HDECP0070AWSA	J		Sheet,Side Cabinet
601	LX-BZ2222AXZZ	J	AB	Screw,Special
603	LX-JZ0010AFFD	J	AA	Screw,ø3×10mm
604	LX-LZ0006AWZZ	J	AC	Push Rivet
605	XBBSD20P04000	J	AA	Screw,ø2×4mm
606	XEBSD30P10000	J	AA	Screw,ø3×10mm
607	XEBSD30P12000	J	AA	Screw,ø3×12mm
608	XESSD30P10000	J	AA	Screw,ø3×10mm
609	XHBSD30P06000	J	AA	Screw,ø3×6mm
610	XJBSD30P10000	J	AA	Screw,ø3×10mm
611	XJBSD30P14000	J	AA	Screw,ø3×14mm
612	XJBSF30P10000	J	AA	Screw,ø3×10mm
613	XJSSD30P10000	J	AA	Screw,ø3×10mm
614	92LSC0308MBZI	J	AB	Screw,ø3×8mm
615	92LSC0308RBZI	J	AB	Screw,ø3×8mm
616	XHBSD40P08000	J	AA	Screw,ø4×8mm
618	XEBSD26P10000	J	AA	Screw,ø2.6×10mm
619	XEBSD26P08000	J	AA	Screw,ø2.6×8mm
620	XEBSD30P08000	J	AA	Screw,ø3×8mm
621	LX-EZ0010AWFD	J	AA	Screw,Special

ACCESSORIES/PACKING PARTS

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
	QANTL0008AWZZ	J	AH	AM Loop Antenna
⚠	QPLGA0003AWZZ	J	AF	Adaptor,AC Plug
⚠	QPLGA0004AWZZ	J	AF	Adaptor,AC Plug
	SPAKA0319AWZZ	J		Packing Add.
	SPAKC1283AWZZ	J		Packing Case [Except for Australia/New Zealand]
	SPAKC1284AWZZ	J		Packing Case [For Australia/New Zealand]
	SPAKP0032AWZZ	J	AF	Miramat Bag,Unit
	SSAKA0007AWZZ	J	AB	Polyethylene Bag,Accessories
	TCAUS0019AWZZ	J	AD	Label,Warning [For Thailand]
	TCAUZ0035AWZZ	J	AB	Sheet,Caution
	TCAUZ0110AWZZ	J		Sheet,Approval [For Russia]
	TGANE0011AW82	J		Warranty Card [For Philippines]
	TINST0109AWZZ	J		Operation Manual [For Thailand]
	TINSZ0723AWZZ	J		Operation Manual [Except for Australia/New Zealand/Russia/Thaland]
	TINSZ0724AWZZ	J		Operation Manual [For Australia/New Zealand]
	TINSZ0725AWZZ	J		Operation Manual [For Russia]
	TLABB0001AWZZ	J	AB	Label,Japan [For Set]
	TLABE0591AWZZ	J	AB	Label,Bar Code [For Asia/Middle and Near East/Africa]
	TLABE0592AWZZ	J		Label,Bar Code [For Australia/New Zealand]
	TLABJ0003AWZZ	J	AB	Label,Japan [For Packing Case]
	TLABN0112AWZZ	J	AA	Label,Serial Number
	TLABR1219AWZZ	J		Label,Bar Code
	TLABS0100AWZZ	J	AB	Label,Gost Rostest
	TLABS0102AWZZ	J	AB	Label,Gost Rostest
	TLABZ0838AWZZ	J	AB	Label,FDA
	TLABZ0986AWZZ	J		Label,Feature [Tape 1] [Except for Australia/New Zealand]
	TLABZ0987AWZZ	J		Label,Feature [Tape1] [For Australia/New Zealand]
	TLABZ0988AWZZ	J		Label,Feature [Tape 2]
	92LBAG760C	J	AA	Polyethylene Bag,AC Plug
	92LFANT1746A	J	AD	FM Antenna
	92LGCARD1266E1	J	AC	Warranty Card
	92LLABL1204C	J	AA	Label,MADE IN MALAYSIA
	92LLABL1507B	J	AA	Label,Made in Malaysia
	92LPANEL713A	J	AB	Panel,Made in Malaysia
	RRMCG0304AWSA	J		Remote Control
	UBATU0001AWZZ	J	AE	Battery Lid,Remote Control

P.W.B. ASSEMBLY (Not Replacement Item)

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
PWB-A	92LPWB3754MANS	J	—	Main
PWB-B1~3	92LPWB3754DPLS	J	—	Display/Headphones/Monster Bass (Combined Ass'y)
PWB-C	92LPWB3552CDUS	J	—	CD Servo
⚠ PWB-D1~3	92LPWB3754PWRS	J	—	Power/Amp./Transformer (Combined Ass'y)
PWB-E	92LPC99C017	J	AE	CD Loading Motor (PWB Only)
PWB-F	92PF567-649	J	—	Tape Mechanism
PWB-G	QPWBF0027AWZZ	J	AD	CD Motor (PWB Only)
PWB-H	92LPWB3553MICS	J	—	Mic

OTHER SERVICE PART

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
	UDSKA0004AFZZ	J	AZ	CD Pickup Lens Cleaner

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION

CP-M4000

SPEAKER BOX PARTS

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
901	HPNLS1035AWSA	J		Front Panel,Left
901	HPNLS1034AWSA	J		Front Panel,Right
902	CWAKP1053AWSA	J		Net Ass'y
903	GBOXS4007AWSA	J		Speaker Box Ass'y,Left
903	GBOXS2007AWSA	J		Speaker Box Ass'y,Right
904	HDECQ0767AWSA	J		Super Tweeter Cover,Left
904	HDECQ0779AWSA	J		Super Tweeter Cover,Right
905	HDECQ0770AWSA	J		Super Tweeter Ring,Left
905	HDECQ0796AWSA	J		Super Tweeter Ring,Right
906	HDECA0011AWSA	J		Decoration Bar,Left
907	HDECA0012AWSA	J		Decoration Bar,Right
908	TSPC-0932AWZZ	J		Label,Specification
909	QCNWN2049AWZZ	J		Crossover Network Ass'y
909-1	————		—	Crossover Network
909-2	————		—	Tweeter Cord (With Capacitor C1,2)
909-3	————		—	Midrange Cord (With Capacitor C3,4)
909-4	————		—	Screw,Special
910	PCUSG0022AWZZ	J	AB	Foot Cushion
911	LHLDZ8001AWSA	J	AD	Catching Holder
920	XJBSD40P20000	J	AA	Screw,ø4×20mm
921	XJBSD60P20000	J		Screw,ø6×20mm
922	XJBSD30P12000	J	AA	Screw,ø3×12mm
923	XJBSD30P10000	J	AA	Screw,ø3×10mm
SP1,2	RSPA20001AW6W	J		Woofer
SP3,4	RSPA00026AW6S	J		Midrange
SP5,6	RSPA00027AW6T	J		Tweeter
SP7,8	LHLDZ1369AWM1	J		Super Tweeter

PACKING PARTS

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
	SSAKH0068AWZZ	J		Polyethylene Bag,Speaker
	SPAKZ0789AWZZ	J		Miramat Sheet,Speaker
	SPAKA0320AWZZ	J		Packing Add,Left
	SPAKA0323AWZZ	J		Packing Add,Right
	SPAKC1285AWZZ	J		Packing Case,Speaker

CD-M4000W

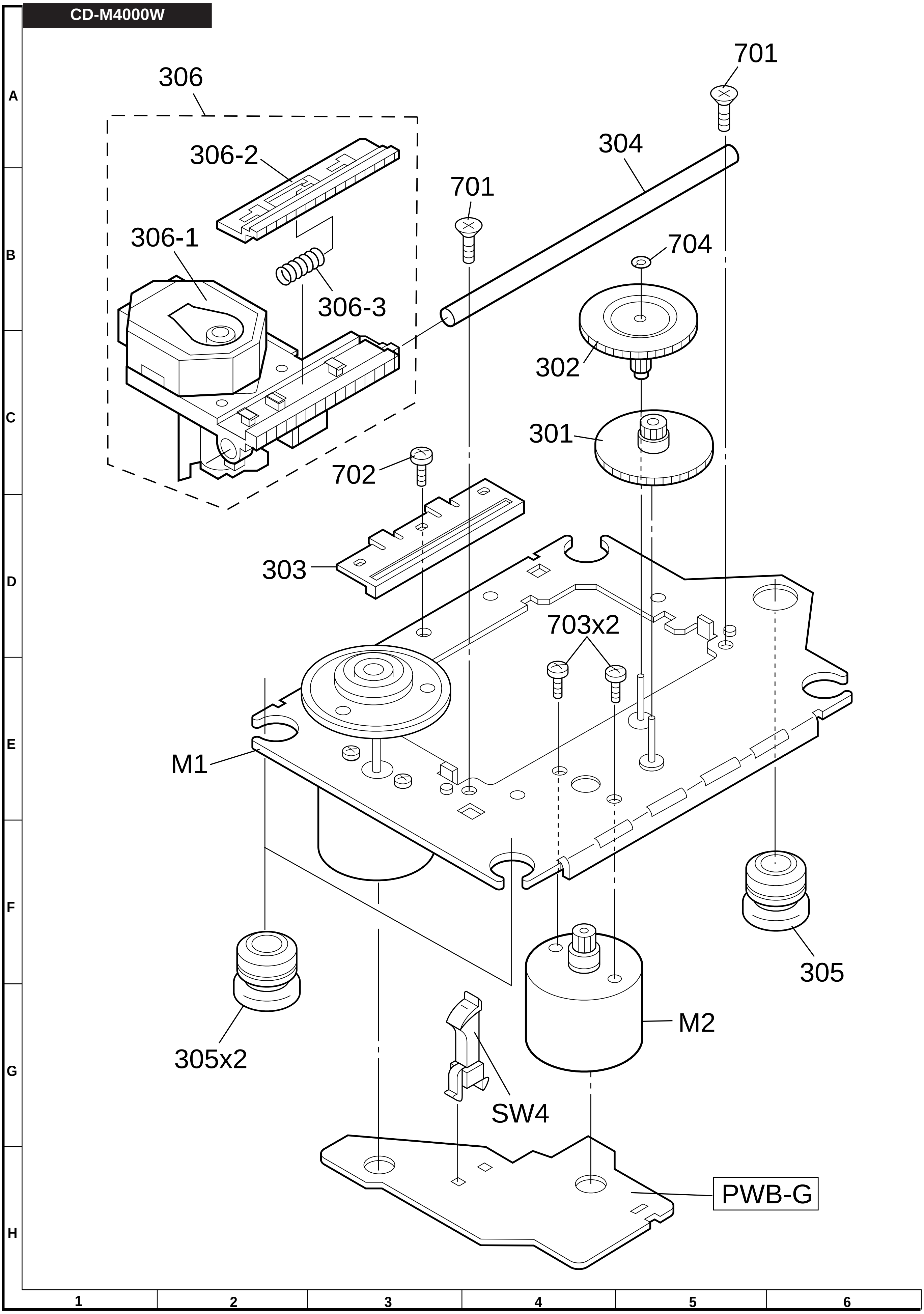
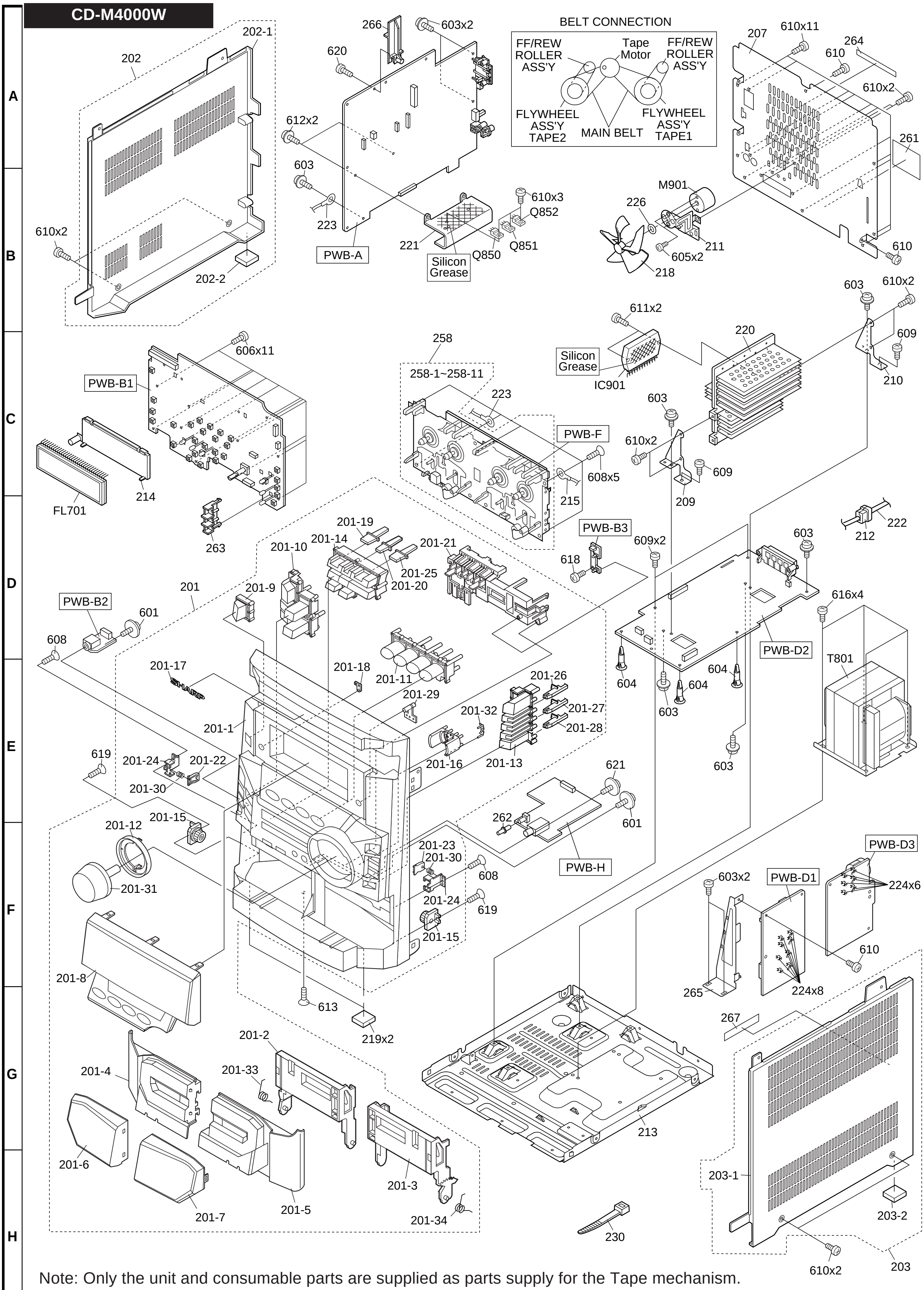


Figure 8 CD MECHANISM EXPLODED VIEW



Note: Only the unit and consumable parts are supplied as parts supply for the Tape mechanism.

Figure 9 CABINET EXPLODED VIEW (1/2)

CD-M4000W

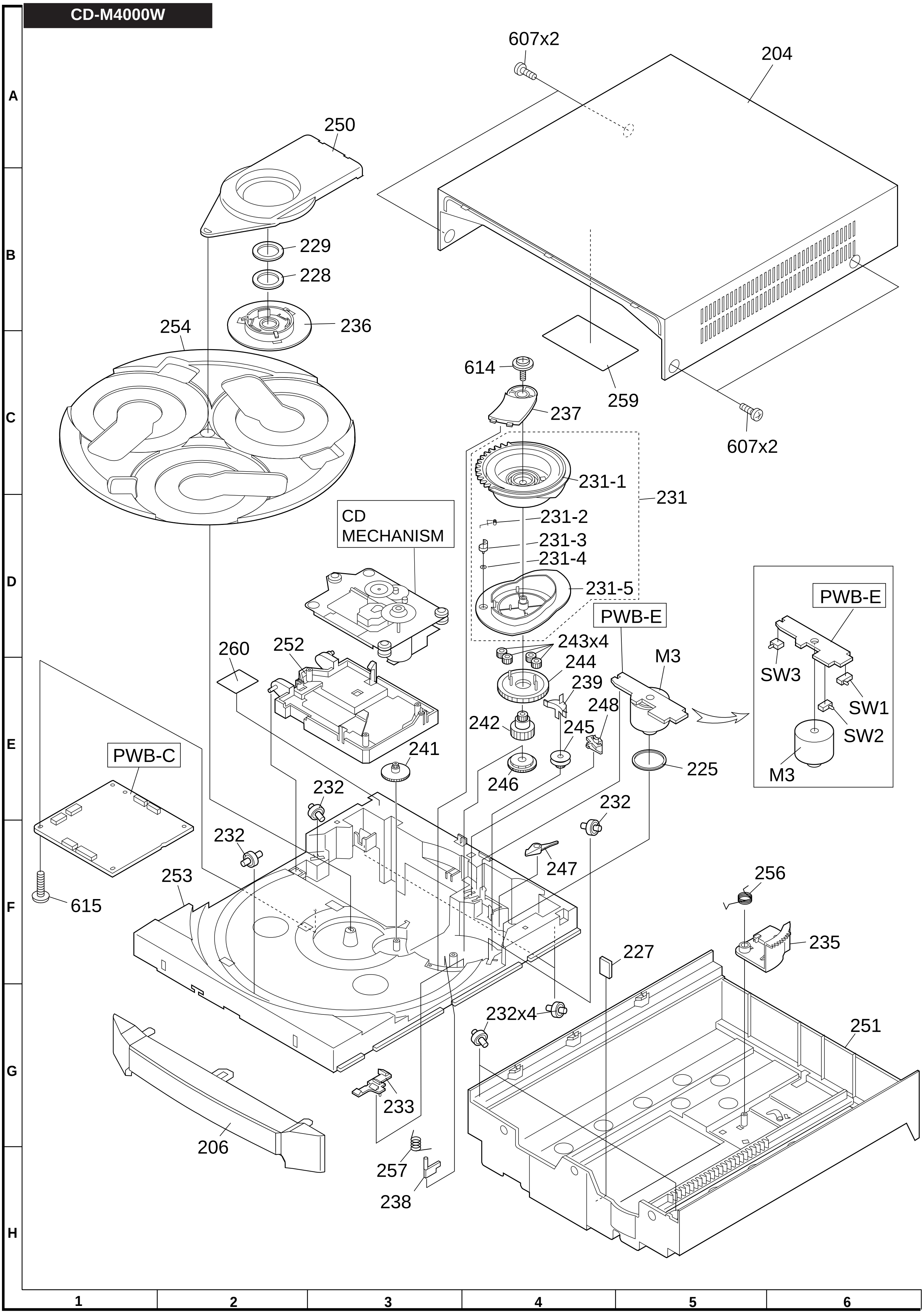


Figure 10 CABINET EXPLODED VIEW (2/2)

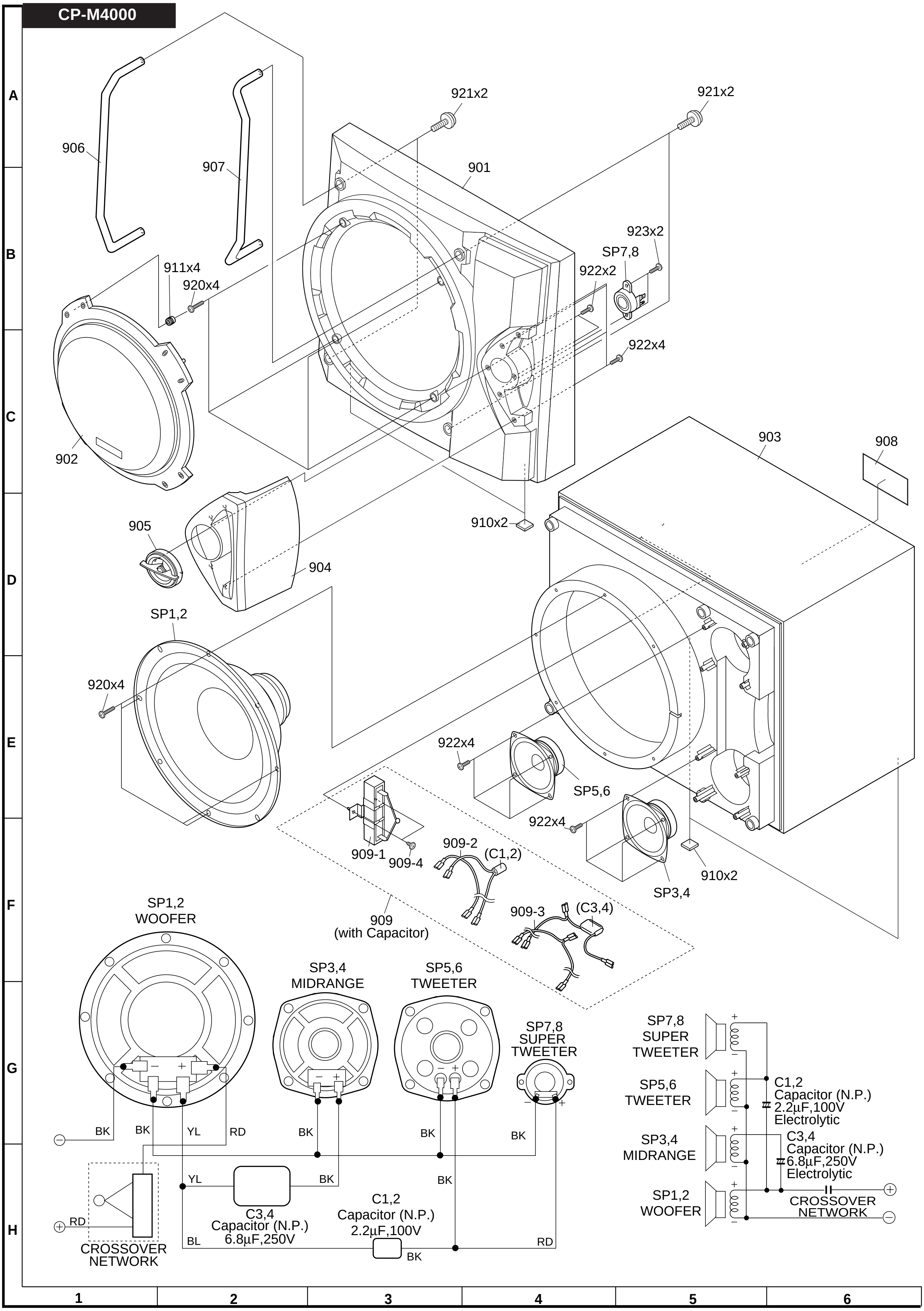


Figure 11 SPEAKER EXPLODED VIEW

— MEMO —

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